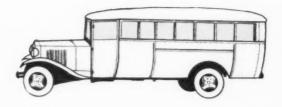
the

AMERICAN SCHOOL BOARD

a periodical of school administration

JOURNAL









School Transportation...
growing through the years
into an enormous operation
(see pg. 37)





School Bus Chassis:

Why you should see your Chevrolet dealer before you buy

Right now, you're probably vitally concerned with the question of which school bus chassis to buy. Here, for your information, are some impressive facts about Chevrolet.

EASY ON SLIM OPERATING BUDGETS

One thing that makes Chevrolet the most popular of all school bus chassis is the way it keeps to a budget. Every Chevrolet, from the 8-passenger Model 3106 Carryall to the 60-passenger Model 10802 chassis, is built to push operating costs to new lows. Take engines. Every Chevy engine provides plenty of power for rugged routes, yet uses regular-grade gasoline. And high compression ratios squeeze more miles from every gallon. Maintenance costs are kept to a minimum by such features as full-pressure lubrication, forged steel crankshaft and oil bath air cleaner.

ENGINEERED FOR SAFE, SURE STUDENT TRANSPORTATION

Naturally, Chevrolet chassis meet National Education Association School Bus Standards for safety. In point of fact, Chevy exceeds many standards, with greater front and rear axle capacity, reserve battery capacity, superior power and performance, extra tire capacity and full frame length. For even greater safety, your Chevrolet school bus chassis comes equipped with Twin-Action rear brakes —a vital factor in surer, more positive braking. Chevrolet's own high standards of workmanship and materials assure your transportation system of maximum safety. And your Chevrolet dealer can offer speedy, efficient service by thoroughly trained mechanics.

How to find out more about Chevrolet school bus chassis—and what to do about it

Your nearby Chevrolet dealer will be happy to give you complete information on Chevrolet chassis. Ask him to call on you, and you'll get the facts firsthand.

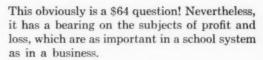
The important point is that you make sure a school bus chassis bid comes from your Chevrolet dealer. That way, you'll know just how logical it is to put Chevrolet chassis on your school routes. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

NO ROUTE'S TOO RUGGED! CHEVRO



How do YOU RATE

as a business man?



For example, your school system has a major investment in heating and ventilating equipment and in controls for that equipment. If such equipment is not kept in good working order, the loss of efficiency in only one season and in just one building can be serious.

Multiply that by the number of buildings you have, and the dollar figures become substantial. More fuel is consumed, breakdowns occur unexpectedly, and equipment wears out prematurely.

It's simply good business, therefore, to insist on preventive maintenance in your buildings... on regular inspection and adjustment of equipment and controls. The controls in particular, should be inspected annually, because upon their effective operation depends the efficiency of the entire heating and ventilating system.

Right now, is the ideal time to have your Johnson Temperature Control System checked for the coming heating season. The nominal cost includes inspection and adjustment, by an experienced factory-trained Johnson mechanic, of all thermostats, valves, dampers, and other control equipment. No repairs or replacements are made unless ordered by you. Call your local Johnson branch office today, or mail the coupon.

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| | r nearest office s at your Summer S | |
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| School or Organization | | |
| Address | | |
| Address | | |





Borrowing (a bit liberally) from the calculus, we imply that student learning (y) is a function of:

A = modern seating like Arlington's and . . .

B = such highly important elements as teachers, textbooks and student motivation.

While not minimizing the importance of "B", we think you will find "A" always a vital variable.

Certainly, pleasant modern design, convenience, desks and seats that fit the student and attractive color finishes contribute materially to each student's approach to learning.

You will find Arlington ideally designed for every student and classroom need . . . for every grade from kindergarten to adult. You will also find that Arlington design provides unusual durability, to keep your seating equipment costs over the years at a minimum. For complete information, we invite your inquiry.



SEATING COMPANY

ALLINGTON HEIGHTS, ILLINOIS







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dependable source
of supply

JOURNAL

EDITORIALS

- 52 Desirable Redirection
- 52 Transition Periods in School Boards
- 52 Executive Qualities
- 52 The Better Motive

A JOURNAL SURVEY

School Transportation

- 40 Guides Toward Quality Bus Programs, Mosher
- 40 Good Drivers: Key to a Safe and Effective School Bus Program, Anderson
- 42 A School Bus Maintenance Program, Watson
- 43 Hints on Better School Bus Purchasing, Paradise
- 44 Free Aids for Better School Bus Program Buying

FEATURES

- 12 NSBA Report: Survey Reveals Vigor of State School Board Associations,
- 15 How to Be a Good Board President, McFeely
- 17 Let's Review In-Service Education Programs, Schaaf
- 21 Time Schedules in the Grades, Bell and Green
- 24 Education's Role in Recreation, Graham
- 26 On Selecting and Using the School Attorney, Roe and Wells
- 28 Educational Television on a Budget, Grover
- 50 Role of the Principal in Meeting Increased Enrollments, Helble
- 56 Remove Shackles and Watch Growth!, Scribner

WORD FROM WASHINGTON

46 Administration of Defense Education Law Still Controversial, Exton

SCHOOL BUILDING AND OPERATION

- 32 A High School Building and the Future, Rickards and Hines
- 45 A Training Program for Lunch Employees, Colton and Hurley

DEPARTMENTS

- 8, 48 Surveying the School Scene
- 10 Pros and Cons
- 12 NSBA Report
- 54 School Product Ideas
- 58 New Books
- 63 Personal News
- 64 New Products
- 73 Reader's Service Section

OUR COVER . . .

From the horse-drawn wagon to the modern transit-type, 64-passenger bus, the transportation program has developed into an important service of the schools and our five-part review (pg. 37) contains a wealth of ideas for improving your bus operations.

For your index ...

An Index to Volume 138, January to June, 1959, has been prepared. For your free copy, address a post card to Bruce Milwaukee, P.O. 2068, Milwaukee 1, Wis., asking for index 138.

A review of your JOURNAL for June (pg. 4)

WILLIAM C. BRUCE, Editor

Published on the 25th of the month preceding the date of issue by THE BRUCE PUBLISHING COMPANY, 400 North Broadway, Milwaukee 1, Wisconsin. CENTRAL OFFICE: 20 North Wacker Drive, Chicago 6, Illinois. EASTERN OFFICE: 233 Broadway, New York 7, New York.

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KRUEGER 900-E SERIES

Especially designed to provide outstanding quality seating for economy budgets

> Study the structural details of these "economy buy" chairs closely, for few folding chairs offer so much for so little. Here's comfort and durability you'd expect to find only in chairs costing much more. For example, these chairs have an extra large seat and backrest comparable to the finest chairs in our line. In addition, they feature one-motion simplified opening and closing and fold flat to frame thickness for compact storage. Select the model you want, then compare it with competitively priced chairs - You'll quickly realize it's the quality buy of the low price, economy field and one that will provide many years of seating satisfaction.



STEEL SEAT

No. 902-E



No. 903-E

your JOURNAL for June

"Are we teaching the 'right' subjects?" is a question that concerns many boards of education currently inquiring into the structure and scope of the curriculum of their schools. While much of this recent scrutiny has been concentrated on the offerings on the secondary level, more and more boards are now revising the subjects stressed in the grades.

In your Journal for June, we've included a very practical discussion of the theory and practice of time schedules for elementary subjects (pg. 21). What is the purpose of budgeting time? How are time schedules formed? How are they evaluated? How are these administrative, time-allotment suggestions used with variations for individual students in individual classrooms?

We believe you'll find this article worthy of re-digesting every time your board meeting agenda calls for an examination of the curriculum in the grades.

Other features of note:

- 1. When does the board need legal counsel, how much should he be paid, what are some criteria for selecting the school attorney—these are a few topics of consideration (pg. 26) of a disturbingly neglected area of school operation: the relationship between the board and superintendent and school attorney.
- 2. A wealth of ideas concerning the use of ETV in smaller communities is discussed in one of the few articles we've seen on the subject (pg. 28) not limited to larger communities where larger sums for capital outlay and operation are possible.
- 3. Time for re-planning your in-service teacher training program for another year and here's aid (pg. 17) in the form of suggestions for a great variety of projects to be included in your 1959–60 program.

There are a dozen more articles in this issue of your JOURNAL, many of which we feel deserve to be "must" items on your reading list. And be sure to check through the regular departments!

for July ...

A feature review of the new J. Sterling Morton, West, High School in Berwyn, Ill., an example of realistic and appropriate educational specifying of attractive and sane design, of sound and relatively maintenance-free construction at defensible costs. It's the type of "community-fitted" school that squashes "palace" charges!

The Editor

Demountable CHAIR TRUCKS

Seven standard sizes hold both X-and Y-type chairs — upright or harizontal under-stage models. Demountable ends and chan-angle frames permit empty fruits stacking.

New! TABLET ARM CHAIR

Unusually strong and sturdy with tablet arm rigidly mounted on tubular support — automatically raises or lowers when chair is opened or closed. 7. Ply tablet arm faced with natural birth or mopte— or plastic laminate. Safety designed for non-lipping, and to eliminate pinching.



KRUEGER

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CHANGE OF ADDRESS. When you have a change of address kindly report it to us at once. Send us your old as well as your new address and be sure the Postmaster is notified. Postal regulations restrict forwarded service on magazines to two issues only.

EDITORIAL MATERIAL. Manuscripts and photographs bearing on school administration, superintendence, school architecture, and related topics are solicited and will be paid for upon publication. Contributions should be mailed to Milwaukee direct and should be accompanied by return postage if unsuitable. The contents of this issue are listed in the "Education Index."

A bandwagon worth jumping on!

Just look at the reasons school bus buyers have for boarding the Dodge bandwagon: Choice of powerful V-8 or dependable Six engines . . . capacities from 30 to 66 pupils. New hydraulically actuated clutch, and suspended brake and clutch pedals for easy operation and added driver comfort. And, of course, Dodge dependability that never leaves students stranded.

Everything about the extra-rugged Dodge school bus chassis sounds a *safety* note, too. Exclusive driver-adjustable parking brake, for instance. And rear-shackled front springs for better driver control under all road conditions. Powerful brakes. Standard dual headlamps—the list could go on and on. Ask your Dodge dealer about *all* the reasons why . . .

 $\begin{array}{c} {}^{\text{today,}} \\ {}^{\text{it's real smart}} \\ {}^{\text{to choose}} \\ \text{Dodge} \\ \\ \text{SCHOOL BUSES} \end{array}$



Concentration is easier...



the Venbitt year-round syncretizer air conditioner

The Nesbitt Year-Round Syncretizer is a new, quiet operating air conditioning unit designed especially for the classroom. In winter, it heats, ventilates and cools (with fresh outdoor air)—in summer, it ventilates, mechanically cools and dehumidifies. Throughout the year, it performs these functions automatically to meet individual room requirements. It assures every student—anywhere in the room—the comfort conditions necessary for highest learning efficiency . . . at any time during the school year.

Economical Heating . . . uniform warmth over the entire room . . . no cold spots . . . no drafts. Unit

sets back at night to save fuel, heats room quickly before morning occupancy.

Draftless Ventilation . . . a constant supply of fresh outdoor air is supplied by the Year-Round Syncretizer to disperse disease germs—combat stuffiness and odors.

All-season Cooling . . . economically provides outdoor air in winter, intermediate seasons and cool summer nights. Cools mechanically in warm weather.

Unsurpassed Humidity Control . . . on humid summer days exclusive pre-cooler prevents hot, humid outdoor air from entering the room without being conditioned. It "wrings" one-half gallon of moisture from the air on a typical summer day.

...learning rate is faster

it's -5° or 95° outside

Student comfort is essential to the learning process. Trying to keep alert and attentive in a stuffy, overheated classroom or to work in a chilly or drafty one, distracts the student and lowers learning efficiency. The conscious or unconscious effort to maintain the bodily heat balance takes precedence over virtually every other consideration.

The best teaching and the finest facilities cannot make their proper contribution to the learning process unless the classroom is kept at the correct comfort level. This means controlling room temperature and humidity under all conditions, and keeping fresh air circulating without noise or drafts.

The Nesbitt Year-Round Syncretizer solves all these complex classroom thermal problems quietly and automatically. It assures ideal comfort conditions needed for maximum learning efficiency.

Get complete details on the Nesbitt Year-Round Syncretizer: Send for publication 11-2.

Menbitt

COMFORT CONTROLLED CLASSROOMS

JOHN J. NESBITT, INC., Philadelphia 36, Pa.

Sold also by American-Standard, Industrial Division, and American-Standard Products (Canada) Ltd.

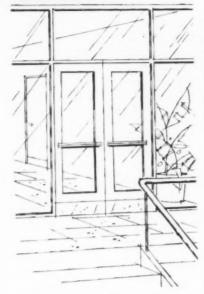
creates the right classroom climate for learning efficiency

Costs Less to Install . . . the Year-Round Syncretizer system uses smaller, less expensive system components (pipes, pumps, chillers, etc.) because less chilled water is required for same cooling capacity. Factory fabrication of unit piping reduces job site labor.

Costs Less to Operate . . . with the Year-Round Syncretizer system only spaces in use need be conditioned . . . not the entire building. Mechanical cooling required only when outdoor air is inadequate to meet cooling requirement.



Enclosed stairwells can prevent disaster!





PARTITIONS for custom-fitted stairwell enclosures at low cost

SCHOOL SAFETY AUTHORITIES stress that drafts in open stairwells multiply fire and suffocation hazards! A low-cost solution that can prevent disaster: ColorLine partitions to enclose stairwells, seal off drafts, check spread of smoke and fumes.

Built of 100% adjustable UNI-STRUT, metal framing, ColorLine partitions are custom-fitted on the job. No expensive major remodeling. Only ColorLine partitions provide complete flexibility, handsome styling and fast, low-cost installation. Stocked for immediate delivery in all major cities.

COLORLINE stairwell enclosures are paneled with wire glass or other fireretarding materials, include half or full length glass doors.

Open next fall with a fire-safe school!

Write for details today.



UNISTRUT PRODUCTS COMPANY

935 W. Washington Blvd. Chicago 7, Illinois

Surveying the School Scene

news notes of special interest

PUPIL PADDLING BILL VETOED

Governor Nelson A. Rockefeller of New York has vetoed a bill that would have authorized school teachers to use force on unruly pupils. The measure would have taken away the decision on corporal punishment away from boards and given it to teachers.

UPGRADING SCIENCE URGED

A report of the National Science Teachers Association urged that experiments in nuclear energy, symbiosis, and ecology should replace wiring doorbells and collecting insects for above average students in today's secondary school classes. Science for the Academically Talented Students points out that scientific information is so widespread that even average junior high school students become bored with the general science class techniques of 10 years ago.

ETV NETWORK SEEN

A national network for educational television will be formed in the next five years, according to a prediction made recently by John F. White, president of the National Educational Television and Radio Center. The network will be made possible, Mr. White said by the "use of video-tapes and the development of regional networks."

White also announced that the National Educational Television and Radio Center (located in Ann Arbor, Mich.) has received a terminal grant of \$5 million from the Ford Foundation. The grant, to be applied from 1960 to 1965, will help pay the Center's operational expenses for supplying programs to the Nation's 40 educational TV stations.

NEW YORK SALARY SITUATION

The New York Board of Estimate approved a proposal under which the board of education hopes to give the teachers \$20,000,000 in pay increases in 1959–60. While only \$10,-000,000 is allocated in the mayor's executive

budget of \$2,173,113,399, the extra \$10,000,000 will be made available by the reallocation of funds within the board's total allotment of \$536.704,394.

Dr. Theobald said \$16,000,000 of the \$20,-000,000 he hopes to have available will be used for pay increases for day teachers; \$1,500,000 for evening high school teachers; \$1,500,000 for supervisory teaching personnel; and \$1,000,000 for guidance and counseling service.

The \$16,000,000 allocation for day teachers will raise starting salaries from \$4,000 to \$4,500, and maximums from \$7,600 to \$7,900.

This revision was announced as the New York teacher organization's salary increase campaign considered "mass resignations" and "work stoppages."

TEACHING RECRUITING PROGRAM

Talented Yale seniors "undecided" about their future are being "recruited" for the teaching profession. In The Carnegie Teaching Fellowship program eight "rookie" teachers are being given a chance to try their hand at teaching under the supervision of regular professors in hopes that the experience will nudge them into teaching as a career.

In this novel program the seniors, likely to be drawn into other careers than teaching, are paid \$3,750 for base pay, tuition, fees, etc. The seniors spend two thirds of their time on the college faculty. They accept the appointments with "no strings attached" and are not obliged, after their one-year stint, to continue teaching at Yale or elsewhere.

"AMERICA" VERSE REPLACES LORD'S PRAYER

In Lawrence, N. Y., a suburban New York City area, a stanza of "America" has replaced the Lord's Prayer — ending a controversy over use of the prayer in public schools. The decision affects public school District 15, which

(Concluded on page 60)

Question No. 1. Have you formulated a plan for the improvement of your schools? Every school board should have a longrange plan for the expansion of educational opportunity in that board's community and for the improvement of the educational program.

Question No. 2. Do you have a specific program for the improvement of instruction in your system? Such a program should reveal consideration of a salary schedule, an in-service training program, clerical assistance, and instructional materials.

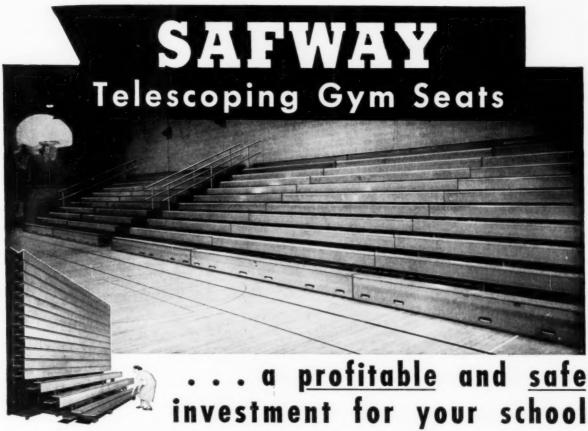
Question No. 3. Have you provided adequately for the administration and supervision of your school system? Education today is big business. To administer it efficiently and economically requires top-level educational leadership and management. The employment of a well-qualified person is the most important job.

Question No. 4. Have you a plan for evaluating the quality and achievement of your schools? As board members, you have made serious efforts to raise budgets, to increase classroom space, and do many other things. What steps have you taken to find out whether such efforts are bearing fruit? Just how good are your schools? Are they better than last year?

Question No. 5. Do you have a systematic program for reporting on your stewardship of the schools to the citizens of the community? Keeping the public informed periodically and regularly about the progress and needs of the schools is essential for public understanding and support of good schools.

Five Questions for Quality

James E. Allen, Jr. Commissioner of Education, New York State



YOU'LL GET profitable full-time use from your gymnasium—planned or existing—when you install Safway telescoping bleachers.

With the seats extended over the floor, you provide superior vision and comfort for spectator events such as basketball. Nest the seats back into their "cabinet" and you instantly clear the floor for daily gym work.

And with only one or several rows locked open, you can set up convenient sideline seating for athletic practice, dancing parties or other gym floor activities.

Safway's advanced gym seat design also gives you these important benefits:

STRONG, SAFE CONSTRUCTION—8 steel columns under every row; uniform load distribution through vertical and horizontal steel bracing; 3 automatic locking devices.

SIMPLE, EFFICIENT DESIGN—Minimum of moving parts. Stable support with extra-long wheel carriages and 8 self-lubricating wheels under each row.

SMOOTH, EASY OPERATION — Minimum metal-to-metal friction. No costly power equipment needed.

HANDSOME, FURNITURE-LIKE APPEARANCE—Seat and foot boards have rich, glossy Golden Oak finish.

SAFE AUTOMATIC LOCKING

Safway's exclusive gravity latch automatically locks each row in relation to every other row (see three photos below).

(1) LOCKING OPEN. As each row is extended, latch drops behind lock bar on carriage ahead to prevent movement between rows.

(2) RELEASING LATCH. After unlocking the cylinder lock, pushing seats inward forces tapered end of latch against unlocking bar, raising notched front end and freeing row ahead.

(3) LOCKING SHUT. With all rows nested, brake pads are lowered and hooks engage brackets on unlocking bar.

Ask for engineering help!

Submit your seating requirements for recommendations by experienced Safway engineers. There is no charge for this service. And write today for your free copy of the new Catalog 166.

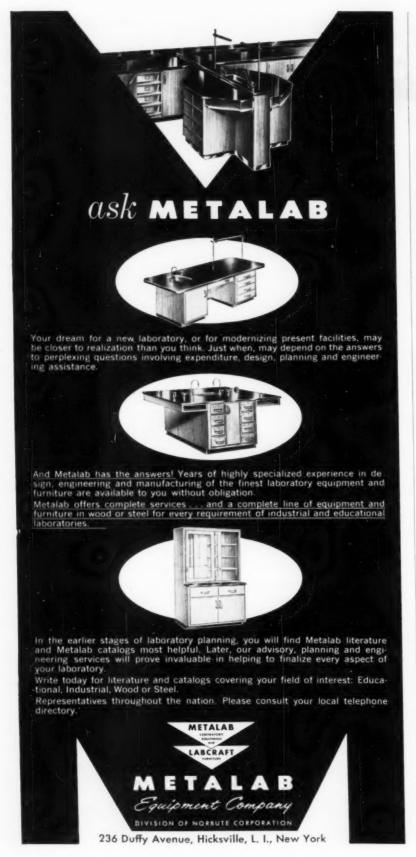












PROS AND CONS

an "open forum" for your views on the school scene

Sources of Building Economy

We were very much interested in the series last year by Harold Boles, "Sources of School Building Economy" (your Journal Of May through December, 1958). We disagreed with some of the suggestions put forth but we realized that they had their origin in a wide variety of situations, some of which might never re-occur. The purpose of the entire series, as we understood it, was to show how some boards and superintendents had solved their particular problems. The one danger we could see in the articles was that some boards would arbitrarily pick out certain suggestions and apply them to situations where they had no relevance.

William Lyman Smith & Smith, Architects Royal Oak, Mich.

AASA Balloting Restricted

On the editorial page of the April issue is a topic "A Professional Organization?" A quote: "The lack of interest . . . is puzzling. . ." This causes me to do a slow "burn."

I was at the convention. I had my ballot. I had to leave before the polls were open.

When the "older professions" and "even newer occupations" take a poll, do you have to be at a certain time at a certain place? And I have an earned doctor's degree.

> Sheridan Stroup Supervising Principal Emporium, Pa., Schools

Can You Afford \$25 a Head for Us?



- Herblock, Washington Post





"You Could Still Make The Varsity Team, Dad!"

Dad came through again on Father and Son Day. He's big league in Junior's eyes.

Dad has his eyes on Junior, too . . . likes to see him study hard, play hard . . . instructs him in the rules of fairness, in the rules of safety. He's really concerned about safety . . . and he's impressed with the "Hydroguarded" showers installed at the school.

When new school plans were revealed by the school board, dad was delighted by the emphasis on modern safety measures. A safe shower system was on the list and Hydroguard individual *thermostatic* controls were written into the specifications.

Hydroguards eliminate the greatest of all shower hazards—scalding. Simple, single-dial controls deliver to the bather only the water temperature he or she has selected for personal comfort. Even if turned to full hot, temperature is held to within the limits of complete safety. And should the hot or cold water supply fail, the shower instantly shuts off. Annoying bursts of hot or cold water that can cause injury due to a slip or fall in the effort to escape are eliminated.

Yes, Hydroguard is the standard for safety in school shower systems.

Request the Powers booklet on Safer Showers and ask to see the slide film on Safe Shower Systems.

POWERS

Specialists In Thermostatic Controls Since 1891

Standard For Safety In Shower Systems



POWERS

Hydroguard*
Individual Thermostatic
Controls

| The Powers Regulator Company, Dept. 659, Skokie 3, Illinois | |
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| Send illustrated booklet, "Safer Showers". | |
| Arrange for showing of new slide film, "Safe Shower Systems". | |
| Name | |
| Title | |
| Address | |

N.S.B.A. REPORT

Survey Reveals Vigor of State School Boards Associations

HAROLD V. WEBB

Associate Executive Director for Field Services, NSBA

The increasing effectiveness of school boards and the status which they enjoy in the public mind is due in large part to the creative, dynamic leadership exerted by the 51 state and territorial school board associations. Because the success and effectiveness of the National School Boards Association is so intimately tied up with the activities of the various state school boards associations, it seems appropriate from time to time to report on the progress of these affiliated groups. In terms of active state associations, staff personnel dues and budgets, publications, and programs, it would seem profitable to compare the situation as it is today with the situation as it was approximately three years ago.

Fifty-One Active Associations

Writing in your JOURNAL for December, 1955, Edward M. Tuttle reported there were 44 active state school boards associations, with two additional states nearly ready to organize. Today there are 51 active state and territorial associations affiliated with the National School Boards Association.

It is important to note that these various state associations are providing leadership to school boards by promoting clinics and workshops for new board members, in-service programs, and strengthening the working relationships between school boards and superintendents, principals, teachers, and the public.

Many state associations have exerted great effort and have produced enviable results for good school legislation through their work with state legislatures. Many of the state school boards associations have also exerted leadership in developing cooperative relationships with other groups interested in better education. More and more, legislators and other citizens are turning to the effective, well-informed state school boards associations for help, information, consultation, and even guidance

in improving education.

In 1955 Tuttle reported there were approximately 57,000 school districts in the United States with over 15,000 district boards as active members of their state associations. Today, there are approximately 40,000 school district boards with about 15,000 as members of the state associations. While the number of member boards has remained constant in the past three years, the percentage of those which are members in the state associations as related to the total number has risen from 26 per cent to 371/2 per cent. And the percentage of public school pupils represented by these boards has risen from 75 to 80 per cent to approximately 90 per cent.

Staff Personnel

Thirty state associations now have one or more full-time employees for a total of 66. In all, 44 states employ persons on a full or part-time basis for a total of 112 employees. In 1955 21 states employed 42 full-time and 11 part-time personnel, with 12 states employing 16 part-time personnel. A total of 69 persons were employed on a full or part-time basis. The quality of leadership exerted by the staff personnel of the various state associations is truly gratifying. The executive secretaries of the state associations represent a wide range of background and experience. Business men, civic leaders, former school board members, former superintendents of schools, college professors, and other educational leaders make up this group. A few of the states have field secretaries in addition to the executive secretary and office assistants. Today the amount of money appropriated per state for salaries for employees ranges from \$300 to \$67,395 for a total for all the state associations of \$566,218.

Dues and Budgets

The dues structure that helps to support

the work of these various state associations varies greatly. In 1955 some states had as many as 20 classifications, ranging from \$1 per district to a maximum of \$745 per district. Today the number of classifications has increased to 55, and the range from \$2 to \$1,274 per district. In 1955 the actual income from dues in the various states ranged from \$105 to \$73,000. Today the range is from \$150 to \$99,975. The total income from other sources today is \$238,920 total. The additional sources of income include revenue from advertising, exhibits at conventions, convention fees, sale of publications, and other miscellaneous items.

In 1955, the ten leading states, in order of the amount of financial support provided from member boards, were Illinois, New York, California, Pennsylvania, New Jersey, Washington, Iowa, Minnesota, Louisiana, Michigan. Today the top ten include New York, Illinois, California, Pennsylvania, Ohio. Washington, New Jersey, Minnesota, Louisiana, and Michigan. The total income for all the state associations is \$819,253.

Publications

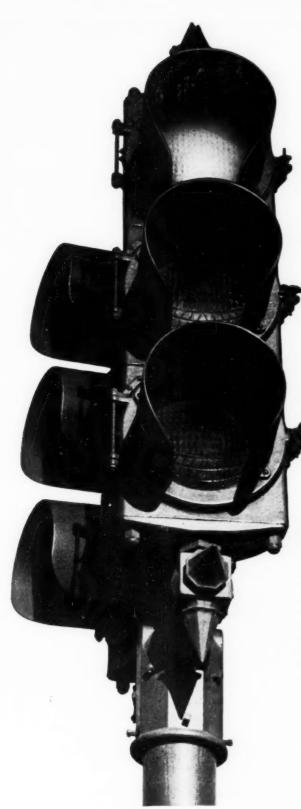
In 1955, 38 states reported regular publications such as bulletins, journals, magazines, or newsletters issued from two to twelve times per year. The number of copies printed per issue ranged from 250 to 13,650. Today, 44 state associations report issuing publications to their membership on a regular basis and one prints as many as twenty thousand copies. These publications help the school board member in discharging his responsibilities for the improvement of schools. Many of the state associations have also developed handbooks to guide school board members.

Programs

All of these associations are constantly striving to improve the effectiveness of their activities as they try to assist the school board member to do a better job. All but two or three of the state associations hold an annual convention where programs of inspirational and informative nature are provided. As has already been mentioned, clinics, workshops, and conferences are held to study specific problems and to provide the school board members with in-service training programs. Consultative service is provided by a number of the associations to member boards. The officers and executives of the various associations are constantly seeking ways to improve their programs, to add features which will help the school board members of their states.

Much of this article has dealt with contrasts to the situation as found in 1955. There is one statement written by Mr. Tuttle in his report of December 1955 which is not in contrast, but can be used to close this report:

"All in all, the school boards association movement is in a vigorous and growing condition, of which we may well be proud, but with which we should never be satisfied. Much remains to be done, organization-wise and service-wise, before the associations reach their full potential of influence for good in the advancement of public education in America."



We protect our children TO and FROM school...BUT are they protected while they are IN school?

Protection from the spread of fire is as important in a school building as it is at home . . . deserves the same careful consideration of school board officials and architects as hospitals and other buildings where safety is a "must."

A plan for a school building can only be "safe" design when every wall and ceiling is made of non-combustible, fire-resistant materials that can match the characteristics of Genuine Lath and Plaster.

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New Prestressed Concrete Florida Elementary School Wins Design Award

Low completed cost prompts School Board to build 3 additional schools of same design

The greatest single requirement for the Duval County elementary school was economy of construction. In close order came fireproofness and ease and economy of maintenance.

The structure is approximately 35,360 sq ft in area and contains some 39,000 sq ft of prestressed Double T roof slabs. Over-all, the school represents about 300,000 cu ft at the contract price of \$297,000; the cost per sq ft being \$8.40. That's the cost benefit...there are others.

At the Sarasota regional conference of the American Institute of Architects in 1958, only one school was recognized for an award among various types of buildings from four states. This was the school.

Further, the \$8.40 cost per sq ft, together with the fireproof and maintenance-free character of the building, so pleased the School Board that it has seen fit to build it, with slight modifications, on three additional sites.

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the AMERICAN SCHOOL BOARD JOURNAL

June, 1959

How to Be a Good Board President

VANETTA R. McFEELY

Retired President, Highland Park, N. J., Board of Education

The office of president of the board of education is a fascinating avocation. One of its more interesting aspects is the fact that by a vote of the board members, one all of a sudden becomes "all things to all men," concerning education in the school district he is serving. His fellow members have indicated that, in their opinion, he can direct their meetings, represent them officially, and keep the business of the board up to date and rolling. The public feels free to stop him on the street, call him on the phone, or send him letters questioning, explaining, or complaining. The school staff takes his election at face value and assumes that he is prepared for the job. Perhaps, besides himself, the only one who questions his omnipotence is the superintendent of schools (who knows him), but who is stuck with him for at least a year and has to make the best of it.

Upon election to this position, one suddenly becomes aware of these things. Searching for an answer to the inevitable question, "what do I do now?" the conclusion one reaches is that his first responsibility is to get on with the business of the board. "But how?" you ask. Sitting at the table during prior meetings this had not seemed to be such an herculean task.

During the two years that the writer served this office the "how" became the most consuming question. How do you best run a meeting? How do you get done what needs to be done? How do you answer the public?

The following tips have been found most effective and satisfactory on our board's operations, and are presented with the hope that some of these ideas will be of help to other presidents of the board of education.

On expediting meetings (plan the agenda in advance).

- A. When considering topics for the agenda try to get an expression of the various viewpoints represented on the board.
- B. Confer with the superintendent to find out what his most pressing needs are.
- C. Exchange ideas with him so that he may be informed as to the board's thinking on a given subject.
- D. Discuss all topics with him so that he

may be prepared to answer all the questions of the board.

II. On conducting the meeting (conference and general).

- A. Present the agenda.
- B. If you believe one problem more pressing than another get agreement of the board to tackle it first by presenting your reasons why. (Usually it is because the superintendent needs a deci-

The president . . . as presiding officer . . . should be the leader of the board but not its "dictator." To be the best leader he needs to know parliamentary procedure, and he should possess such traits as tolerance, fairness, and appreciation of the value of time, and other characteristics of good judgment.

- School Boards and Superintendents, Reeder



- Worcester, Mass., Schools

- sion or an expression of the board's position.)
- C. Present all you know about the subject to be discussed (without giving an opinion) or ask the individual whose responsibility it is to present it.
- D. Make sure everyone has a chance to express his viewpoint.
- E. Insist on each member's right to his opinion.
- F. Have confidence in the sincerity of an individual's stand.
- G. Be sure all angles of the problem are presented.
- H. Insist, firmly but tactfully, upon your right to run the meeting.
- Handle lightly and diplomatically (if possible) any sign of rebellion or disruption.
- J. Try to get one good general laugh out of a "tight" meeting; it helps to clear the air. (Proper timing is essential.)
- K. Don't let the discussion reach the stage of "beating the topic to death." If this seems to be happening, call for action or defer action, whichever seems the wiser at the time.
- L. Keep members ever alert to the danger of taking over administrative duties.
- M. Guard zealously the right to a decision by the whole group. Sometimes, due to like thinking among board members, it may appear that a bloc has formed an opinion. Sensing this possibility, it is wise to try to direct the discussion

- in such a manner as to dispel any suspicion of bloc action.
- N. Express your own opinion on a subject but never give it first. By deferring, you can weigh all opinions expressed, present any points overlooked by others, and summarize their thinking. It helps if you take notes while the others are speaking.
- Be sure to state specifically the conclusions reached by the group and properly note these in writing. Such notes can be very important for future reference.
- P. Bow to the inevitable lack of time to complete all the items on the agenda, without frustration, if possible.

III. On getting along "generally."

- A. Never speak hastily. Give thought to your utterances. Have on hand such statements as: (1) "Thank you for bringing it to my attention, I will look into it." (2) "That's an interesting viewpoint, I'm not sure I agree, I'll have to think about it." (3) "This situation is under study by the board; I'm glad you are interested." (4) "Thank you for your comments. I'm sure they will be helpful." This approach leaves the field clear for any kind of play and usually convinces the questioner that you are on the ball.
- B. Never act in a hurry. "Sleep on it!" is usually good advice. While there are

- some exceptions, very often that telephone call to the superintendent or an even higher authority, county or state, proves to have been unnecessary and sometimes unwise. Proper reflection on a problem usually results in a better solution. This type of delay does not preclude the taking of one or two of your cohorts into your confidence. Even so, there are times when it is better to go it alone for a short period of time. This gives you time to "jell" your own thinking.
- C. Never neglect keeping the superintendent informed. Since the aims of the board and the superintendent are the same. I know of nothing more important than this.
 - It is wise to talk to the superintendent first about anything that has been brought to your attention. Often he can clear up the whole thing. Certainly he should have an opportunity to investigate a situation before it comes before the board.
 - Confidential discussions with the superintendent pay large dividends. He feels secure in knowing that you consider him capable of handling his job and he is not thrown off balance by disclosures about which he has had no previous knowledge.
- D. Never give up trying. As they say "it's a great life if you don't weaken."

Let's

A basic boost to better schools: a good in-service education program aimed at improving instruction in the classroom—

Review

In-Service Education

PEARL R. SCHAAF

Director of Elementary Education, Nebraska Department of Education, Lincoln **Programs**

The term in-service education is rather a "Johnny-come-lately" to our educational vocabulary, so perhaps an explanation of this expression is in order right at the start. In-service education includes all of those activities in which a teacher might participate which would contribute to his improvement on the job. The basic aim of all in-service education is the improvement of instruction in the classroom.

The Beginning Teacher

We must accept the idea that a college teacher education program does not completely prepare a teacher for effective teaching. Rather it represents an organized effort to prepare a prospective teacher to begin teaching. The degree to which this is successful depends, of course, upon how good both the candidate and the program happen to be.

Fortunate, indeed, is the young teacher who is graduated from a quality pre-service program into a school system with good orientation and induction procedures, pre-school and "during school" workshops, faculty organization for committee study and activity, stimulating staff meetings, and purposeful, sympathetic supervision. Here is an op-

portunity for a teacher to begin as an amateur and to grow into a professional—an opportunity every young teacher deserves to have, not only for himself as an individual, but because of the importance of the profession he serves.

The Experienced Teacher

Along with supplementing the preservice preparation, the in-service program should help the well-prepared and experienced professional teacher keep abreast of the expanding knowledge and developments that relate to his continuing professional competency.

In-service activity should always be related to some important, current, local problem which is of real interest to those who will engage in the activity. The need should come from within, not from without. If the need is "felt" only by the administrative staff, the proposed activity might very likely get a count of ten in the first round.

Ideally, all teachers and administrators in a school system are included in the school in-service program — custodians and other nonteaching employees, too. Kinds of in-service work will vary with the kinds of needs indicated and, in many instances, in-service education might well be an individual matter between the superintendent, principal, or supervisor and the classroom teacher. Remember, teachers are as different as the many children which they teach. Each teacher must continue to grow from the point where he is at the present time. Each administrator and supervisor has needs that differ from those of other administrators and supervisors. Therefore, no one pattern of in-service growth can be prescribed.

Things to Do

In-service experiences are many and varied. The list below consists of some things which might be done. There are many others. Each school has different needs and therefore no one program can be tailor-made for any one school.

- Workshops pre-opening, summer, or during-the-school-year. These experiences need to be carefully planned and evaluated. In many cases they will be the "spark" for further inservice experiences.
- The writing of a statement of school philosophy or defining the objectives of the total educational program. An experience such as this should help teachers and administrators to see where their school is going.



ONE STANDS OUT

Whether engrossed in music or mathematics this young lady's future education is assured... She will enjoy all the benefits of the finest educational system in the world... ours! She will have the benefits of the finest design, construction, and comfort in school furniture. The new Virco #410 Study-Top Combination Desk, shown on this page was originally built to school board specifications, and is gaining enthusiastic acceptance in many school districts across our land. For your copy of the new full-color Virco catalog with complete specifications write Virco Manufacturing Corporation, Post Office Box 44846, Station "H," Los Angeles, California or Conway, Arkansas. School furniture "kindergarten through college" by Virco.

VIRCO



• The preparation of curriculum guides for the various subject areas. This is a huge task and not one that can be rnshed.

• Textbook selection. Another major undertaking which can result in much

professional growth.

· Meetings at which consultants or resource people from outside the local school system give help. Resource people might be selected from local colleges or universities, the State Department of Education, other school ystems, or business and industry.

 Participation in professional organizations and attendance at professional meetings. Classroom teachers, as well as school administrators, need to have an opportunity to attend conferences and meetings which will result in

professional growth.

• Use of films or other audio-visual materials, including bulletin boards. Preparation and follow-up should be done for teacher in-service films just as is done for teaching films used in the classroom with children.

 Inter-classroom visitation or inter-school visitation. Teachers should not consider this simply as a day or a half day "off"; visits should be carefully planned and evaluated to provide a real teacher-growth situation.

· Reading of professional books and magazines. The alert administrator will watch for articles which will be of interest or help to particular teachers.

· Staff meetings in which teachers work and plan together. Sometimes these meetings will include the whole staff, sometimes they will include only teachers of a particular area or of a

particular grade.

Help given an individual teacher by the superintendent, principal, or su-pervisor. This kind of in-service education may take almost any form. Some varieties are classroom visitation, followed by conference; informal chats; demonstration teaching; classroom help with unit teaching and group work; aid given in gathering needed materials; help in learning how to use various pieces of equipment, such as movie projector and tape recorder; or perhaps special orientation for the new teacher.

· Action research in the classroom. This is a particularly fine thing in which teachers try their ideas on a small scale in their own classrooms. Perhaps only one or two teachers might be working in a particular area.

Participation in off-campus or study center classes and summer sessions. Some school districts contribute a sum of money toward the expenses of teachers who attend summer sessions at colleges or universities.

Four Big Helps

There are some aids which are very essential to a good in-service program. One, of course, is time. Many activities lose their possibilities for effectiveness because teachers are forced to participate in them at the end of an already long and busy day. Some systems are going to a longer school year to give teachers some time released from teaching for workshops, committee work, and professional meetings. Some schools hire substitutes now and then to release teachers for visitations and work sessions. In many schools, secretaries handle much of the routine record-keeping and duplicating work so teachers are free for other activities.

Another essential to effective work is a comfortable, pleasant place to carry on the in-service activity. Teachers should be able to work together without interruption amid pleasant surroundings.

A cup of coffee, too, and the informal conversation that generally accompanies it, is a big help in getting any work ses-

sion off to a good start.

An effective in-service program will require resource materials and resource people. Teachers can't pull things out of the air. Books, magazines, films, and other audio-visual materials are essential. Because in-service work is a tremendously important thing, money should be set aside in the school budget for its financing.

Mr. In-Service

Once it was said that "Man works from dawn to setting sun, but woman's work is never done." How to paraphrase this properly for today is hard to know and should probably not be attempted. School administrators, however, will no doubt agree to the idea that their work is never done! Particularly will this agreement be true when it is declared that giving continuing leadership to inservice education is one of their most important responsibilities. If it is true that the improvement of instruction is the major reason for school administration as a profession, it follows that inservice education, broadly conceived, is a continuous task that can never be

The key person in any effective inservice program is the school administrator. He provides the leadership for any activity that goes on in the school. His attitude, his enthusiasm, his relationship with the other staff members spells the difference between the success or failure of any in-service program. The administrator creates the environment in which teachers desire to grow, are stimulated to think, and feel free to experiment. The administrator gives the encouragement, the recognition, the help when needed, sees that physical facilities are conducive to effective work. helps have necessary materials available (might even make the coffee). Through working with teachers, the good administrator helps the teachers to see their problems and creates in them a desire to work on these problems.

And, of course, the good administrator sets an example by his willingness to study, learn, and grow with his staff.

don't overlook these projects in planning your in-service activities



Workshops . . . pre-opening, summer, or during the school year.

Inter-classroom or inter-school visitations . . . carefully planned and evaluated.

Curriculum guides . . . preparation of which should be accomplished slowly

Convention participation . . . professional organizations offer stimulating meetings.

TIME SCHEDULES IN THE GRADES

SCIENCE ARTS

LANGUAGE
SOCIAL
STUDIES

eac
mines
of the

JOHN W. BELL and ARTHUR S. GREEN

What blocks of time should be budgeted to each subject area determines the educational scope of the grades —

"How can the elementary school day and week be used most productively?"

This is a question that needs careful study and experimentation in every school system. We haven't yet found the final answers. Although nearly every school district or system has an official time budget — allocating a weekly block of time to each subject area — there is need for a re-evaluation of official policy regarding the time budget.

Budgeting Time in the Elementary School

First, there has been a shift in educational values since World War II. Nearly everybody is agreed that science, for example, should have a larger portion of the elementary school time than it traditionally has had. The economic struggle highlights science because it gives great promise of solving the problem of improving products, reducing costs, and so distributing purchasing

power that a constant high standard of living for all citizens of the world will be possible.

The social scientists are looking to the public schools to set up a required program of instruction in the social studies that will establish a firm foundation of understanding on which they can build. If large weekly blocks of time are to be accorded to science and the social studies, the quotas of time for certain other areas will have to be reduced. In any event, each community will be obliged to determine, after considerable public discussion of the problem, just what areas of instruction must relipquish some time for the sake of others, It is

Dr. Bell is district superintendent of the Chicago, Ill., Schools, while Mr. Green is a teacher in his district. hardly likely, however, that the public will want the schools to give less time to reading, arithmetic, English composition, handwriting, and spelling.

A single time schedule to be applied alike to all pupils enrolled in the elementary school is not the answer. The science of education dictates variability and flexibility. There should be one type of schedule for the 60 per cent of the pupils who constitute the average group. The slow and retarded will need a larger block of time for the fundamentals and essentials than the average. The academically talented will need less time for the 3 R's. This time differential can most profitably be used by the latter in the pursuit of classic literature, grammar, rhetoric, foreign language, typing, wide reading of history, or the physical sciences. The specially talented will need the time saved through better scheduling for their music, art, the dance, leadership, special service, and so on.

Implementation of the Tentative Policy

Assurance of implementation of a policy adopted by the board of education is predicated upon good planning, careful briefing of principals and teachers regarding what is wanted, and continuous surveillance of the program of instruction in each school and classroom.

The present high transiency index for teaching personnel in all school systems imposes greater efforts by administrative officials toward co-ordination of the work of the various members of the local elementary school staff. Although each teacher is properly left free to make out her own time schedule, the alert principal will call for a copy of each and check it for adherence to policy. The superintendent will probably have to assume the responsibility for getting all principals to do so.

The principal not only needs to check the schedule on paper, but he must also assist some of his teachers in learning the techniques for sticking to the time schedule to which they have committed themselves on paper. It isn't easy for a small minority of teachers to keep to schedule and to avoid excursions into tangential interests.

There seems to be rather general agreement throughout the country that it is more productive for the teacher to make a time schedule which divides the school day into only four or five segments rather than a dozen or more. This practice requires the teacher to plan her teaching so that she will integrate various aspects of the curriculum that are correlated in order to avoid cutting up the day into such small segments that there is little time for anything other than the details of shifting from one type of work to the next. Moreover, such rapid shifts militate against the development of a high degree of motivation and sustained application by the pupil.

Much attention should be given in each school unit - and by each teacher - to the very difficult problem of the most effective and productive planning of the content of approach for each block of time. Poor discipline, disorder, dawdling, and indirection can be disastrous. It is essential that both teacher and pupils have a sense of urgency about the achievement of definite goals each day, yet the tempo must not be so feverish, nor the anxiety of the teacher regarding the achievement so great, as to result in excessive tension in the classroom. Proper integration and correlation of the work in the various areas requires much planning, practice, evaluation, and re-evaluation. The process requires also much in the way of exchange of ideas and successful practices.

Time Schedules and Pupil Needs

Many schools throughout the country are now grouping pupils homogeneously for purposes of instruction to achieve better results. The groupings used are permanent, temporary, or a combination of both. The pupils in elementary schools where the local unit is large enough to enroll as many as three or more classes at a particular grade level are often grouped permanently on the basis of their ability and achievement. This grouping reduces to a marked degree the spread in the abilities and achievement of the members of a class, making it possible for the teacher to adapt more precisely her program of instruction to the needs and abilities of her pupils. Thus she makes the time at her disposal count for more.

If she has the lowest group, for example, she may use textbooks that were designed for a grade one or two years lower than the actual grade placement of her pupils. If she has the top group, she may very well use books designed for pupils in a grade one or two years higher than the grade placement of her class. Or she may find it advisable to have her pupils — working either singly or in small committees - drawing their sources of information, their reading materials, in large part from the school library. The academically talented need to have access to reading material that will make them stretch. On the other hand, excessive vocabulary and sentencestructure limitation may starve them by interfering with their optimum rate of progress. Despite the fact that the pupils are grouped permanently by grade levels according to their achievement, there probably will still be a need to cut across grade levels and to regroup certain selected pupils for relatively short blocks of time.

This regrouping may be achieved, for example, by scheduling all the languagearts work of grades 3, 4, and 5 at a particular period in the day, say, from 9:30 to 10:15. Or all the arithmetic in grades 6, 7, and 8 would be scheduled for a particular period - from 9:00 to 9:40, for example. This arrangement will make it possible to send selected pupils needing remedial work in reading or arithmetic down to a lower grade level during certain days of the week. Selected pupils far advanced in basic subjects may well be drawn from three different grade levels for special work in areas like foreign language, science, music, or history.

Who will teach this work? Some school districts provide special teachers. Others may have to resort to increasing the size of the regular groups for these special periods in order to free a teacher or two to teach the special groups. Of course, these special groups will vary in

size according to the interests and talents of the pupils, the nature of the educational activity, and the size of the school.

Reasons for Time Differentials

The time devoted to the various facets of the curriculum should probably vary in accordance with the difficulty that the pupils in the various groups experience with them, as well as with the worth of the content both to the individual pupil and to society. It is most essential, for example, that even slow pupils eventually learn to read material written for general consumption and read it with both interest and understanding. It is also exceedingly important that they be able to compute well enough to function adequately in life's activities requiring quantitative thinking that is so necessary for all of

Not enough is known concerning the ages at which additional quantities of time spent will pay the biggest dividends, nor how the time and practice should be distributed. The factors of maturation, experience, and motivation are important ones that need careful experimentation at the various age and grade levels. Likewise, the academically talented should have an opportunity to broaden their base of culture and deepen their interest in scholarship by attending summer sessions, special offerings during the regular school day, and afterschool activities. They should be motivated to look forward to college and graduate schools, to enjoy scholarship, and to aim high. They should be imbued with a mission to serve more than to be served. Beginning at the intermediate grade level, an exacting program of testing should be one of the tools used to pilot them.

For best results, a systematic program of guidance and an information service should accompany any experimentation in the fields of variation of curriculum and time schedules to meet the needs of different types of learners. The parents must understand the reasons for the changes contemplated and made.

In Summary

We must learn to make better use of our school time. Time schedules must be variable and flexible if we are to meet the educational needs of our pupil personnel in the elementary school. The needs of the various segments of the pupil personnel, such as the academically talented, the average, the slow, and the retarded, must be met. Differentiation of curriculum, assignments, and approach can be realized more effectively through variability in time schedules and special groupings of pupils according to needs than by the traditional heterogeneous groupings.

how the time schedule works in the Chicago schools

The elementary school weekly time distribution recommended by the administration (upper) for each major subject area and (lower) one teacher's adaptation of this schedule in accord with the needs, interests, and abilities of her pupils.

To provide for students over and under the norm in working with this schedule, both the time and the nature of the curriculum in the various fields must be varied. In the field of English composition, for example, the more competent students are given a rather concentrated dose of grammar and rhetoric, in addition to a regular program of expository writing. Much stress is placed on limiting the topic, deciding upon the conclusion before the writing begins, and so organizing the message as to drive forward toward the conclusion in a logical and effective manner. All the various aspects of unity, emphasis, and coherence, variety in sentence structure, use of the precise word, symbolic language, and originality are emphasized. With the lowest group of pupils, the objectives of composition are less lofty. More attention in this group must be devoted to punctuation, spelling, sentence sense. Simple organization and matters of usage must be stress. Much drill and repetition are required. A teacher faced with the necessity for varying the time to achieve the standards that are set for her by the principal is in a kind of action-research situation. The time required will vary with her efficiency, and the efficiency can come only as her experience with groups of the various types increases.

Various patterns are used in enriching the curriculum within the time allotment for the subject areas. A teacher of French, for example, may turn over his class to some other teacher for instruction in science and arithmetic while he takes that teacher's class for instruction in French. A teacher competent to direct an orchestra may instruct a group of pupils drawn from several different grade levels while his regular class is taken over by a teacher whose pupils have gone to the library or to home mechanics. In some instances a private music teacher is brought into the school to give lessons in class piano, orchestra, or band. This arrangement requires no reshuffling of teachers.

ELEMENTARY SCHOOL WEEKLY TIME DISTRIBUTION

Maximum and minimum time allotments are given for each curriculum area to allow flexibility in scheduling the program to meet the special needs of the pupils in each school and in each classroom. The schedule is intended to serve as a guide. It is not intended to compartmentalize learnings nor to discourage attention to correlated learning experiences.

CITIZENSHIP PRACTICE THROUGH PUPIL PARTICIPATION IN GROUP AND INDIVIDUAL ACTIVITIES IS BASIC IN EACH CURRICULUM AREA.

| CURRICULUM AREAS | Time | dist | ributi 2 | on in | minute 4 | s by e | rade |
|--|------|------|-------------|-------|-------------|--------|------|
| ANGUAGE ARTS | | | | | | | |
| Reading, Literature Oral and Written | MAX. | 900 | 865 | 700 | 600 | 600 | 550 |
| Composition, Grammar, Spelling, handwriting | MIN. | 850 | 800 | 625 | 500 | 500 | 400 |
| ARITHMETIC | MAX. | 100 | 125 | 225 | 225 | 225 | 225 |
| | MIN. | 50 | 100 | 150 | 150 | 150 | 150 |
| SOCIAL STUDIES History, Geography, Civics | MAX. | 150 | 175 | 200 | 225 | 275 | 280 |
| | MIN- | 125 | 125 | 150 | 200 | 200 | 200 |
| SCIENCE | MAX. | 100 | 100 | 150 | 175 | 175 | 225 |
| | HIN. | 50 | 50 | 125 | 150 | 150 | 175 |
| FINE ARTS | MAX. | 150 | 150 | 150 | 150 | 160 | 160 |
| Art, Music | MIN. | 100 | 100 | 100 | 100 | 80 | 80 |
| PHYSICAL EDUCATION Health, Safety, Gym- | MAX. | 250 | 250 | 250 | 250 | 250 | 250 |
| nasium, and Recess Activities | MIN. | 175 | 175 | 175 | 175 | 170 | 170 |

| TIME | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | |
|------------------|-----------------------------------|----------------------------------|--------------|--------------|--------------|--|
| 9:00 A.M. | | Openia | g Exercises | | | |
| 9:05 | Arithmetic | Arithmetic | Arithmetic | Arithmetic | Arithmetic | |
| 9:50 | Reading | Reading | Reading | Library | Reading | |
| 0:30 | | | ecess | | | |
| 10:45 | Gym - Girls Arith. or Comp. | Gym - Boys Arith. or Comp. | Social Stud. | Social Stud. | Social Stud. | |
| 11:15 | Social Stud. | Social Stud. | | | | |
| 1:30 | | | Composition | Composition | Spelling | |
| 1:50 12:00 N. | Spelling | | | | | |
| 1:00 P. M. | Science | Science | Science | Science | Book Report | |
| 1:30 | | | | | Music | |
| 1:45 | English | Spelling | English | Reading | 2:00 Health | |
| 2:15 | Art | Music | Film | Spelling | and Safety | |
| 2:25 | | Art | | Art | Civic Club | |
| 2:30 | | - | Book Reports | - | Meeting | |
| 3:00 P.M. | | | (Oral) | | | |

| CURRICULUM AREAS | Minutes per week | | | | | | | | | | |
|-------------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| CORRICOLOM AREAS | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | | | |
| LANGUAGE ARTS | | | | | | | | | 480 | | |
| SCIENCE | | | | | | | | | 210 | | |
| HEALTHFUL LIVING | | | | | | | | | 165 | | |
| FINE AND PRACTICAL ARTS | | | | | | | | | 200 | | |
| SOCIAL STUDIES | | | | | | | | | 295 | | |
| ARITHMETIC | | | | | | | | | 225 | | |

Sydney J. Harris, a columnist, addressing the Illinois and Iowa Education Associations, said:

The public uses education as a sort of a trash-can in which to dump all the odds and ends of social living.

Doesn't Johnny know how to wipe his nose? The teacher will show him. Is Johnny shy? School will take care of that. Is Suzy too aggressive? School will take care of that. Can't Johnny dance? Let the school teach him. Should Joe learn how to drive a car? Then let's have driving instruction in the school.

Mr. Harris then listed the 14 accomplishments expected of schools that the White House Conference on Education drafted in 1955, and commented:

Ain't that, in the immortal words of Socrates, a pistol!

As I interpret this list of accomplishments, the teacher is supposed to be a scholar, a humanist, a social director, a psychiatrist, a coach, a prophet, a moral leader, an artist, an entertainer, a high priest, and a magician.¹

Ignoring Mr. Harris's philosophical and psychological assumptions and stifling the impulse to justify educational objectives, one may find an element of truth in his remarks. For example, take the problem of recreation for children. Most people would agree that one of the school's objectives should be education for constructive leisure pursuits.

Schools should teach pupils to like to read, to enjoy good music, to be curious about natural and physical sciences, to be interested in the world's peoples and its problems, and to appreciate literature, art, and drama. They should encourage numerous outlets for creativeness; develop skills useful in sports, "do-it-yourself" manual arts, and hobbies; they should instill in pupils a willingness to work for community wellbeing.

Thus the school is responsible, to some extent, for teaching young people how to entertain themselves constructively. But does this also mean that the school is responsible for their entertainment? If the school teaches youngsters to swim, should it also man the pool with life guards for recreational swimming? If the school teaches boys and girls to dance, should it also sponsor and supervise the community's teen-age dances?

How you answer these questions depends somewhat upon where you live. In many communities, the only public agency that concerns itself with providing wholesome recreation for young people is the school. In other places a recreation commission, a city recreation department, or a park commission administers the program of recreation in

The role of the schools in recreational activities is examined in this discussion of the Springfield, Ore., recreational program in which the schools co-operate with a community agency to sponsor a full-scale leisure-time program —

co-operation with schools and other community agencies and organizations.

Springfield's Program

If you lived in Springfield, Oregon (population 13,000), you would point with pride to the recreation program developed by the Willamalene Park and Recreation District. In Springfield everyone from four-year-olds who enjoy preschool activities to oldsters over sixty who meet weekly for conversation, games, and cards in the Golden Age Club, should be able to find some leisure-time activity to suit his fancy. At present the program includes everything from A to W - art to woodworking, but if you wanted to play a xylophone or a zither, you could do that, too. In the field of arts and crafts alone, a person may choose from these activities: block printing, painting, water and oil. Christmas card making, copper enameling, clay modeling, figurine painting, plastics, jewelry making, rock polishing, ceramics, weaving, wood carving, etc. Equally diversified activities are offered in the fields of music, dramatics, dancing, sports, and hobbies. In addition to these organized activities, the Park and Recreation District maintains city parks and serves banquets and luncheons for service clubs and civic groups.

Program Boosts

How is it possible to offer such an exceptional leisure-time program?

1. A separate millage tax for recreation enables the community to hire a well-qualified, live-wire, full-time superintendent of recreation who is assisted by four other full-time employees — a secretary, a bookkeeper, two maintenance men, and a cook.

A board of directors establishes policies and makes long-range plans for activities and facilities.

3. A citizens' advisory council, composed of representatives of civic, service, and church groups, makes recommendations to the board of directors.

 Service clubs, merchants, churches, and veterans' organizations sponsor teams, swim meets, and parties.

5. Dozens of citizens contribute their talents free of charge in the leadership

of various groups. Other leaders, who are students at the University of Oregon, gain valuable experience and earn modest part-time salaries while working in the program.

The schools, city government, and the park and recreation district co-operate in promoting the recreation program.

Since we are primarily interested in the role of the school, let us see how schools and the recreation district in Springfield work together. An elementary school, a junior high school, and a high school adjacent to the recreation district's swimming pool and Memorial Building cover six city blocks. Facilities were planned so that they might be used interchangeably: The school uses the district's tennis courts, softball fields, and swimming pool; the district rents the school gymnasium for round and square dances, teen-age dances, and church sports programs. The school publicizes activities offered by the recreation district. The superintendent of the recreation district, working with student body officers, plans activities with one eye on the school calendars. Some of the teachers also work part-time for the recreation district, and one of the school board members sponsors the Ski Club.

At the administrative level, close cooperation is achieved in luncheon meetings attended weekly by representatives from the school board, the park and recreation district, the city council, the chamber of commerce, and the hospital administration. In addition to these sessions, the school board, park and recreation district, and the city council exchange minutes of their separate meetings.

Many communities, of course, cannot attempt a recreational program as ambitious as that of Springfield. Often the initial leadership in beginning a program must come from the school board. For example, in numerous communities the school board starts and pays for a summer recreation program for children. Often these sorely needed programs simply would not exist if the school board did not make provisions for them. There are valid reasons, however, that school leaders should urge the establishment of recreation districts and get

¹Sydney J. Harris, "Ain't That a Pistoll" Phi Delta Kappan, 38 (Dec., 1956), p. 83.

Education's Role in Recreation

schools out of the business of recreation as soon as they can.

Apparent Advantages

The advantages of a separate community agency in charge of recreation over a school-sponsored program of recreation are apparent:

1. The community gets a better recreational program because this is the primary concern of a recreation district but it must be a secondary interest within the school's frame of reference. Not only is the variety of offerings in a recreation district's program greater but also the program is more likely to interest persons of all ages.

2. More readily available jobs for young people in the field of recreational leadership will stimulate professionalization of this career. Young persons who want to be recreation leaders should not have to become teachers and enter the field of recreation through the back door. As industry shortens the hours of work, constructive use of leisure time will become increasingly important. We need well-trained recreational leaders today; we shall need more of them in the near future.

3. A separate millage tax for recreation reduces the amount of money that schools must divert from educational to recreational activities.

4. While a community recreation program does not supplant that part of the school's extracurricular program that is educational in nature, it does relieve already overburdened teachers of many supervisory duties connected with the entertainment of children after school hours. Perhaps then teachers will have time to think through and plan more carefully educational activities that may lead to good use of leisure time on the part of their students.

"What's wrong with American schools," a visiting educator from Ceylon said, "is not that they do not do enough but that they try to do too much." Perhaps the modern school's objectives are indeed too all-inclusive. At any rate, if we trim our sails a bit whenever some other community agency can take over, we may more nearly achieve our goals.

GRACE GRAHAM

Associate Professor of Education, University of Oregon, Eugene, Oregon



Above: an aerial view of Willamalene Park and Recreation District and the Springfield, Ore., public schools. Below: two recreational activities in the Springfield program are a hula class (taught by a University of Oregon student) and a rifle safety class, an important topic in Oregon where hunting is a popular sport.





On Selecting and Using the School Attorney

WILLIAM H. ROE and HAROLD C. WELLS

Much has been written about school law and legal aspects of education but the literature is noticeably void on proper administrative relationships of the school attorney to the rest of the staff or the logical way he should function in the existing organizational pattern.

Legally it was settled long ago that a school board has implied powers to employ legal counsel. A statement by a Texas Court exemplifies this logical conclusion: "The authority on the part of trustees to employ an attorney to institute and prosecute an action in their behalf would exist as a necessary incident of powers to contract, and to sue, and to manage and control the affairs and interests of the public schools."

As the complexities of educational management dictate that legal counsel be secured, careful attention must be paid to the establishment of a sound school board - attorney - superintendent working relationship in order to avoid later friction.²

The Need for Legal Assistance

It is clear that there is a growing need by school districts for legal assistance. This need results from many factors but is primarily due to the tremendous increase in school population which has necessitated institutional adaptions and management processes of such a technical nature that the use of legal counsel has become mandatory. A sampling of the activities requiring legal assistance might be listed as follows:

1. School Reorganization. The process of reorganizing small school districts into larger, more efficient units is an extremely complex matter often requiring school elections, interpretations of state

and municipal law, transfer of property, protection of bond holders, and numerous complications which could bring about possible litigation.

2. Purchase of School Sites. Here a host of technical situations arise from clearing of title along with normal sale transactions to the possible property condemnation.

3. Preparing for Building. Subsequent to building more school buildings arises a series of complex activities: petitions, elections, sale of bonds, and proper accounting of funds.

4. New Building Construction. The contractural relations of school districts with contractors working on new school projects is a matter for legal assistance to protect the public interest.

5. Personnel Relationships. Contracts, tenure, unions, soical security, and the growing list of progressive enactments in personnel policies has created the necessity for legal interpretations, hearings, and protection from litigations.

6. Liability. With an increase in the facilitating activities of the school such as transportation and school lunch, the activity programs of classes which include class visitations and field trips, the expansion of the curriculum in driver education and outdoor education, and with the intensification of the extra curricular program in athletics and recreation there arises a possible consequent increase in liability and litigation.

In an attempt to shed some light on this neglected phase of school administration, Michigan State University made a grant from its "All-University Research Fund" to finance a study of the relationship of school attorneys (both special bonding attorneys and local legal counsel) to the board of education and superintendent of schools. The study itself was motivated by queries from boards of education on how they should go about working with legal counsel and complaints from school superintendents about two important aspects of the school attorneys' relationship to the

school district: (1) the frequent infringement upon the educational leadership function of the superintendent by legal counsel and (2) the lack of a fair and consistent policy of fee determination

Poor Organizational Preplanning

Cursory investigation through interviews, correspondence, and discussion in graduate seminars led to the hypothesis that problems in the school board-attornev-superintendent working relationship were the result of poor organizational preplanning at the time the legal counsel was introduced into the administrative pattern of the school districts plus a lack of established policy. The study, then, sought to discover: (1) the present conditions of employment of school attorneys, (2) problems deriving from the three-way working relationship between school board, attorney, and superintendent, and (3) criteria useful in establishing a successful relationship or administrative pattern.

Questionnaires were sent to school superintendents seeking answers to such questions as "How much money do school boards pay for legal counsel on bond issues?" "What contractural agreements or employment relationships do school boards have with attorney?" "From whom does the attorney receive direction and to whom does he report?" "Are boards of education ever influenced in strictly educational matters by opinions of the attorney?" "How are attorneys placed into the established organizational structure of the school?"

Some interesting inconsistencies were revealed by the study. In brief, the survey disclosed that:

Dr. Roe is an associate Professor of School Administration at Michigan State University, East Lansing, and Dr. Wells is Assistant Superintendent of the Livonia, Mich., Schools.

Arrington v. Jones, 191 S.W. 361 (Texas)

^{**}Armition v. 2008. 191 S.W. 301 (1Exas).

**Local legal counsel is the term that will be used to describe the attorney who renders general legal service to a board of education. Special bonding attorney refers to the legal specialist in municipal bond law.

criteria to guide the employment of a school attorney —

- Local legal counsel and special bonding attorneys should be appointed after joint study by the superintendent and the board of education.
- Attorneys should be selected on the basis of specialization.
- Special bonding attorneys should be employed for bond issue elections and subsequent affairs leading to the acquisition of the bond money.
- Fees should be based on the time required for services performed.
- Attorneys should receive direction and **report** to the superintendent of schools.
- Local legal counsel should attend school board meetings only when specific matters in his jurisdiction are anticipated.
- Attorneys should be treated as consultants to the board of education and superintendent.

- 1. Approximately 40 per cent of the school districts polled employ a local legal counsel on a regular basis.
- 2. 52 per cent of the districts pay the attorney on a fee basis 30 per cent on retainer.
- 3. The selection of the attorney was made in 79 per cent of the cases by the board and superintendent acting jointly 14 per cent by the board acting alone.
- 4. Slightly more than 50 per cent of the local legal counsel were specializing to some extent in school law.
- 5. 37 per cent of the districts employ lawyers who reside locally as counsel.
- 6. 67 per cent employ special bonding attorneys for bond elections.
- 7. Less than 30 per cent had specific written policy on relationship of legal counsel to the school administration.

Several Problems

Many problems in the relationship of school board, attorney, and superintendent became evident as a result of this survey. These problems seem to arise as hypothesized because of failure on the part of school boards and superintendents to establish the attorneys in the school district organization and properly define their roles therein.

For example, clear lines of communication do not always exist between boards, attorneys, and superintendents. In only 41 per cent of the cases studied did the atorneys' instructions come from the superintendent, and yet 70 per cent indicated that the attorney reported back to the superintendent. Here is a clear instance of potential friction — the direction coming from one source and the report going to another. Misunderstanding, confusion, and lack of confidence breed rapidly in such situations.

Still another major problem revealed is the matter of legal counsel interference in educational policy matters. In approximately 10 per cent of the districts polled, superintendents admitted the legal counsel had "given his unqualified opinion in an official capacity on matters that would be considered strictly educational rather than legal!" While there is no indication of the extent of involvement in educational policy matters, it is clear that the attorneys' influence is often felt. Fully 8 per cent said their board of education had been influenced on educational decisions by the opinion of their attorney. Personal interviews with superintendents suggest that this situation is even more prevalent than the questionnaire revealed.

A third major source of probable "strained relations" between school boards, attorneys, and superintendents lies in the area of fees charged by attorneys. The range of retainers paid local legal counsel by boards of education ran from \$50 in one district polled to \$12,000 in another. At the same time

there was a wide variation in the quantity and quality of work demanded of local counsel in these instances. It is entirely possible that a \$12,000 retainer is not excessive depending entirely on the services required by the board of education. If counsel is expected, for example, to try two or three condemnation cases out of this retainer, the retainer could be argued to be too little. The case in point is that the board of education should know that it is paying a fair and equitable price for services rendered by local counsel whether the retainer was \$50 or \$12,000. This fee should be understood ahead of time and be open to scrutiny of the public. Perhaps a fee 'arrangement based on the time and labor required to properly handle the board's requirements would offer a more equitable solution than an annual retainer.

The same tremendous range is found in the payment of fees to special bonding attorneys. These fees range from .01 per cent to an astronomical 10 per cent of the bond issue! There is little justification for a 10 per cent fee to a special bonding attorney. Such a charge is exorbitant and completely out of the question for a board of education to pay. In fairness to the legal profession it should be pointed out that excessive fees were charged only by a small minority of the lawyers who are practicing school law or municipal bond law. Nevertheless, few as these situations are, they should be exposed for the protection of citizens in some communities.

Criteria for Employing Attorneys

Enough has been said to indicate the importance of careful attention to the establishment of a sound financial and funtional relationship between board, attorney, and superintendent. Are there criteria that can be used to help districts employing an attorney for the first time or who wish to revise their present relationship? It must be admitted that only enough study and research has been done at this time to propose tentative statements. Yet for those immediately concerned with this important administrative problem the following criteria, tentative as they are, should be helpful:

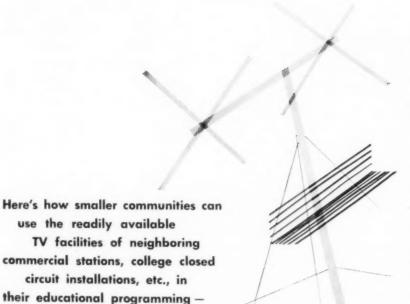
1. Local legal counsel and special bonding attorneys should be appointed after joint study by the superintendent and board of education. The board of education and superintendent must rely on the attorney for sound advice on highly technical matters of real importance. It is essential that they both have confidence in the attorney selected. Joint selection helps to assure that confidence.

³Additional research is being conducted by Mr. Wells in this area. It will be presented in a doctoral dissertation entitled, "An Inquiry into the Working Relationship between Superintendents, School Attorneys, and School Boards in Michigan."

(Concluded on page 56)

Educational Television

on a



DAVID H. GROVER

Instructor of Radio-Television, Oregon State College, Corvallis

Provocative reports on educational television appearing in educational journals are being read with interest by school administrators everywhere. But in the smaller cities of the United States board members and superintendents may be thinking, "This is all fine for the large metropolitan areas, but what hope is there for those of us in the small communities to experiment with educational television?"

TV Available

There may be more opportunity than they realize. At least 500 American cities have television resources of one kind or another, including 100 communities smaller than 25,000 population and another 75 cities of 25,000 to 50,000 population. By understanding television's responsibility to the community, by using a bit of imagination, and by doing a normal job of public relations, the school administrator can utilize these readily-available facilities to determine how TV can best serve the educational needs of his community. And, perhaps most important, it won't cost the public a cent!

A Community's Needs and Resources

The administrator who starts thinking in terms of TV should recognize that there is no ideal form of educational television which can successfully be transplanted to every city in the United

In smaller communities, demonstrations, such as this one in fifth-grade science, can be effective, though simple and inexpensive.



One potentially helpful use of available TV facilities is the teacher workshop in which instructional technique demonstrations provide in-service enrichment.



Budget

States. Each community must consider its own TV needs in terms of adult education, college-level course work, inschool broadcasting, enrichment programming, and various other forms of ETV. Equally important are community resources of money, personnel, equipment, enthusiasm, and all the other factors essential to launching such an educational innovation. Some communities, such as Hagerstown, Maryland, have developed extensive closed-circuit television systems for their schools. Others, such as Cincinnati (see report on Cincinnati's WCET-TV in your JOURNAL for February, March, and April, 1959) and San Francisco, have used in-school broadcasting by community TV stations. And in other areas, notably in Alabama, networks of public school educational telecasting stations have been developed.

A community which is contemplating a venture into ETV normally would study closely the reports of these various approaches to ETV trying to discover which situation was most analogous to its own. However, a certain amount of guesswork would still be involved, and any resultant decision would not be directly adapted to the needs of the community and might contain "bugs" which would not be readily noticeable. The best way to avoid this guesswork would be to pretest TV ideas in the community before expensive com-

mitments are undertaken. Even without definite plans for television the superintendent and board still may be curious about its techniques and its potential in education. The only way to know TV's potential in a given situation is to try it out in that situation.

It is the purpose of this article to show, generally, how hundreds of American cities and towns are in a position to experiment with educational television, and to explain, specifically, how one small western city set up such an experiment.

Available TV Resources

First, it is necessary to understand the size of the television resource which is available. As of February, 1959, there were 516 commercial television stations on the air in the United States. Another 35 stations were operating as educational television stations. These 551 commercial and educational stations broadcast programs over the air from the transmitters to the 44 million TV homes in the United States. In addition to these stations there are 133 closedcircuit television systems in 119 educational institutions throughout the country, plus 21 similar systems in military installations. These closed-circuit systems use television cameras which send pictures by means of cables to nearby sets rather than broadcast the pictures on the air.

On this basis there are some 705 TV systems of one form or another which can be used for communicating information. (There are also hundreds of industrial TV installations which are too specialized for such communication.) These 705 TV systems represent the opportunity for schools everywhere to experiment with educational television.

"But," you say, "we don't have access to all of these stations. Only 35 of them are educational television stations."

It is true that only 35 are primarily educational stations, but virtually every TV station and system in the country conceivably can be made available in some degree to educators. Certainly the 35 educational stations could be expected to be very co-operative. Then, too, consider the educational institutions which operate closed-circuit facilities for classroom teaching or for training television personnel. These institutions have the personnel, the facilities, and the interest in TV's potential necessary to carry out a workshop or experiment. Properly approached, they should be helpful and co-operative. Even the military closed-circuit TV systems seem more available and approachable when one recognizes that most of them are at service academies or schools of some

Commercial Station Aid

Important as these educational sta-

tions and closed-circuit systems are, the commercial television stations still represent the best opportunity for community educational television experimentation. Certainly there are substantially more of them than there are of noncommercial installations, and in a given community there is more likelihood of finding commercial rather than noncommercial TV.

All of these commercial television stations have a responsibility to serve the public in the community in which they operate. This public service generally takes the form of making a certain

amount of time available free to various civic, charitable, and educational organizations for live local programming. When the station first gets its broadcasting license from the Federal Communications Commission it must outline how it plans to carry out this responsibility, and each time the station renews its license it must demonstrate how actually this has been done. So the television station legally should show some interest in educational activities in its area.

But this quasi-legal obligation is normally not as much incentive to the station to work with educators as is the audience-interest possibilities inherent in education. No topic receives more treatment in the mass media of public information today than does education. And since public education is a local responsibility, it is a natural way for radio and TV stations to localize their programming and their public service.

If you have an idea for a TV workshop or teaching demonstration, contact the program director at the commercial television station. Several possibilities exist as to how this experiment might be handled. Many of the smaller stations

Cities of Less Than 25,000 Population With Television Facilities

Alabama Andalusia Decatur

Dothan Florence Selma

Alaska

Anchorage Fairbanks Juneau

Arizona Tempe Yuma

Arkansas El Dorado

California
Carlsbad
Chico
Eureka
Redding
Salinas
San Luis Obispo

Colorado Grand Junction Montrose

Florida Ft. Myers

Georgia Thomasville

Idaho Idaho Falls Lewiston Twin Falls

Illinois Harrisburg La Salle Macomb Normal Urbana

Ames Cedar Falls

Kansas
Dodge City
Emporia
Great Bend
Lawrence
Manhattan

Pittsburg

Maine

Presque Isle

Maryland Salisbury

Massachusetts Adams Greenfield

Michigan Cadillac Marquette Traverse City

Minnesota Alexandria Austin

Mississippi Columbus Tupelo

Missouri Cape Girardeau Hannibal Sedalia Montana Glendive Helena Missoula

Nebraska

Hastings

Hayes Center

Hay Spring

Kearney

Scottsbluff

Nevada Henderson

New Hampshire Keene

New Mexico Carlsbad Clovis

New York Brockport Plattsburg

North Carolina Chapel Hill

North Dakota
Bismark
Dickinson
Minot
Valley City
Williston

Ohio Athens Oxford

Oklahoma Ada Ardmore Pennsylvania Lock Haven State College

South Carolina Anderson Florence

South Dakota Aberdeen Reliance Vermillion Watertown

Tennessee Bristol

Texas

Big Spring
Bryan
Harlingen
Lufkin
Midland
Snyder
Sweetwater

Virginia Harrisonburg

Washington
Ephrata
Ellensburg
Pasco
Kennewick

West Virginia Bluefield Oak Hill

Wisconsin Marinette New London

Wyoming Riverton start their programming in the middle of the day. Teaching and administrative personnel might gather at the studio an hour before the regular telecasting begins. The demonstration could then be handled as a closed-circuit presentation entirely within the TV studio. This might mean that the station personnel would have to start work earlier on this particular day, at some increase in cost to the station. But in the smaller cities where part-time, nonunion studio help is utilized this additional cost would be nominal

Perhaps an even better idea would be to take advantage of your community's natural interest in its schools by conducting the demonstrations at a time when the station is actually on the air. Then parents and taxpayers can witness the workshop along with the teachers, and a valuable public relations job has

been carried out.

Such workshops or demonstrations could utilize the general in-service training programs of the school system, featuring, perhaps, new methods in science, language arts, or other subject-matter areas. Several hours of rehearsal time on camera will be necessary, but the balance of the preparation can be worked into normal school routine. The rehearsals can be held at some convenient time when the station is using film on the air, thus freeing the cameras.

The only costs incurred in this type of in-service TV workshop would be for a limited amount of materials for visual aids, plus the transportation of props, furniture, and students to the studios. All that the television station expects is a reasonably well done and interesting presentation, consistent with the special requirements of the medium. Station personnel will be glad to point out what these requirements are, or consult published sources.

Experiments Should Explore

Regardless of where or why it is carried out, a television experiment of this nature should seek to explore, rather than to sell a particular point of view. It should be approached with an open mind, and yet with genuine enthusiasm on the part of the active participants. It should be evaluated objectively and honestly in terms of the community's situation and needs.

Remember, TV is accessible to hundreds of school systems. ETV may or may not have something to offer to your schools; only through experimentation can its role be properly evaluated in any situation. This experimentation can be cost-free, simple, and effective if you learn to utilize the available TV facilities, to work smoothly with professional television people, and to imaginatively create your own local "do-it-yourself ETV

an in-service teacher training experiment in Corvallis, Ore.

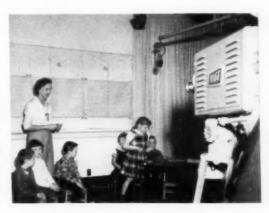
In setting up an in-service experiment, remember that some communities may be naturally reluctant and need leadership by an enthusiastic experimenter. Others may take to it naturally as a result of previous conditioning or circumstances. In the latter group is Corvallis, Oregon, a town of about 17,000 people. The State of Oregon's educational TV station, KOAC-TV, in Corvallis, has been broadcasting classroom television at the college level for a year and a half. The superintendent of schools, Dr. Gerald L. Wallace, was superintendent at Pocatello, Idaho, during a pioneer closed-circuit, in-school telecasting project there and previously had been instrumental in setting up a series of teaching demonstrations on commercial stations in Boise, Idaho, while assistant superintendent there. So Corvallis had experienced some thinking along the lines of ETV.

The initial plans for a two-hour TV demonstration during Corvallis' annual in-service training day were worked out by the district's elementary supervisor. Mrs. Blanche E. McBee, together with. the speech department of Oregon State College which made available its closedcircuit facilities for the demonstration. Eight different demonstrations were prepared, illustrating teaching techniques for writing, spelling, language arts, phonetic analysis, astronomy, and biology at various elementary grade levels. Small groups of students participated in each demonstration. Each demonstration had been rehearsed in the studios one hour after school with all personnel present, a day or so prior to the actual demonstration. The cameramen and studio personnel were beginning students in the basic television classes at Oregon State

Approximately a hundred teachers viewed these teaching demonstrations in two adjacent rooms provided with 24inch television sets. About 80 interested parents also witnessed the workshop. Each viewer was given a mimeographed leaflet which traced briefly the development of television as a teaching medium. No attempt was made to "sell" television; the demonstrations simply afforded the viewers an opportunity to see what could be done with it.

No miraculous mass conversions to TV partisanship occurred among the teachers who participated in the workshop, either on-camera or as viewers. They found that television was no magic wand which could make weak teaching strong. They did see, however, that good basic classroom teaching techniques which were adapted to the medium could be quite effective on television. They realized, more than ever, that visual aids must be well planned and well utilized in the classroom, not merely thrown into a lesson. And perhaps each teacher found the Corvallis television workshop an incentive to self-evaluation of teaching techniques.

Illustrating language-arts techniques in the second grade was part of the two-hour TV demonstration for the Corvallis, Ore., annual in-service training day which utilized the closed-circuit TV facilities of Oregon State College.

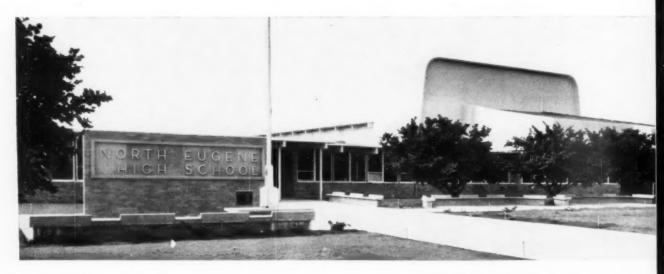


The outstanding North Eugene, Ore.,
High School: planned with the help of a
committee of local contractors and
constructed of top-quality, low-maintenance
materials —



A High School Building and the Future

MONTANA H. RICKARDS and CLARENCE HINES



Functional in design and representative of the best practices in school plant planning, the North Eugene High School, dedicated last fall in Eugene, Ore., is rated by educational authorities as one of the best on the Pacific Coast. In the dedicatory address, Dean William C. Jones, of the University of Oregon, committed the school "to the education of future generations of space-minded American youth." Careful examination of the physical facilities of the building reveal that they are fully adequate to meet the task imposed on them by the speaker.

The building is a one-story structure located on a 20-acre site. Its floor area of approximately 126,000 square feet

Mrs. Rickards is Co-ordinator of Publications for the Eugene, Ore., Public Schools and Dr. Hines, formerly superintendent in Eugene, is now Professor of Education, University of Oregon, and is presently serving as educational adviser to the Kingdom of Nepal.

has been planned to accommodate a student body of 1200 students. With eight additional academic classrooms, for which a place was provided on the basic plan, it will have space for 1500, the intended maximum enrollment. Designed by architects Freeman, Hayslip, Tuft and Hewlett, Portland, Ore., it is one of the most economical high school buildings constructed in the Pacific Northwest in recent years. Its cost per pupil, \$1,362.38, and per foot, \$11.66, were both below Oregon averages for secondary schools at the time of construction. Despite the low cost, the school has many quality features not found in many low-cost, secondary schools.

Co-operative Planning

Credit for the exceptional value for the cost must go largely to the care used by the Eugene school board in planning the school. In addition to the excellent service given by members of the school staff, the board used two lay committees to insure full value for each building dollar. A committee of 35 men and

women sat with the board and reviewed each phase of the plans for the structure as they were presented by architect Palmer Hewlett. In addition, a committee of nine local contractors advised the board as each major decision on materials and construction was made, making recommendations for economies which could be effected without impairing the educational function of the building. This committee studied the final plans carefully for several days before bids were called to discover and correct any errors which might result in added cost. This work was done as a public service by the contractors serving as interested citizens and taxpayers.

As will be noted from the floor plan, the building is essentially a three-wing structure. The academic classrooms are on the east, or left side as one approaches the main entrance to the building which faces north. The lunchroom, library, student lounge, homemaking unit, arts and crafts rooms, offices, and health suite are in the center. The auditorium, gymnasiums, shops and music rooms are in the right or west wing. A





Exterior views — at the left is the main front entrance and above is one of the inner courts — of the North Eugene High School, Eugene, Ore. The firm of Hayslip, Tuft, Hewlett & Jamison of Portland, Ore., was the architects.





One of the two biology labs at Eugene. Rooms for chemistry and physics instruction were also provided.



The girls' gymnasium, located over the school's locker room area on a balcony which has multi-use as seating for the main gym.



The attractive, well-planned auditorium, which seats 700 or half the student body, has a stage that can be used both from the auditorium and the gymnasium, where the full student body meets.



The school library, together with the cafeteria and the student center, form the common use areas serving the three, segregated grades of academic levels located in three "wings" to the common area's left. The library's lighting, a fluorescent luminous ceiling, illustrates the school's quality artificial lighting. Glass block top lights in corridors and selected academic areas aid the natural lighting of the plant.

distinctive feature of the building is that the academic classrooms for sophomores are located in the front section of the classroom wing, those for juniors in the center and those for seniors at the rear of the wing. Common use rooms, such as those for dramatics, little theater, and business education subjects, were grouped to be accessible to all three student levels.

Planned for Low Maintenance Costs

The building is of frame construction, except for the auditorium and gymnasium wing where fire safety was essential because of maximum occupancy. It has a pleasing brick veneer finish and metal sash for low maintenance costs. The floors, except in the gymnasiums, are concrete covered with asphalt tile in corridors and classrooms and rubber tile in the library and lunchroom. The corridors have a tile wainscot, also for low maintenance. Classrooms have top lighting by means of directional glass blocks, and the corridors have bubble skylights.

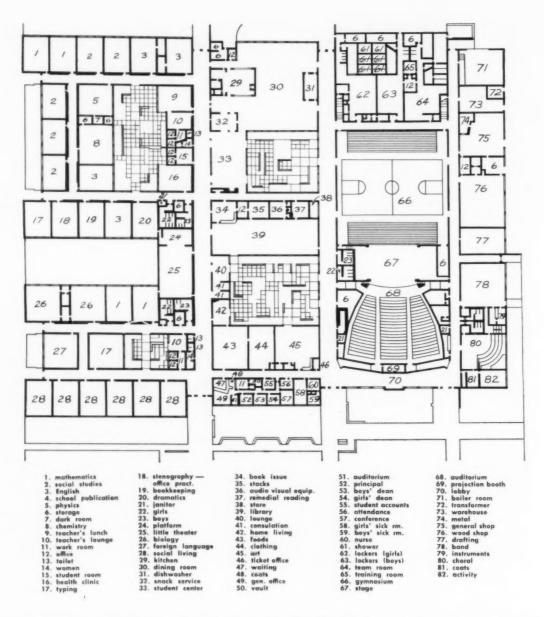
Among the pleasing features of the structure are the courts between the classroom wings and the special rooms in the center wing. The site, a former walnut and filbert orchard, had many mature trees when construction began. Only those which had to be removed in building were taken out. Trees left in the court areas provide pleasant shade for students in out-of-class hours and enhance the beauty of the building from both inside and out.

Special facilities provided are deemed adequate for the maximum enrollment of 1500 students. The school was organized in September, 1957, with a sophomore class of 350. This year it has both sophomores and juniors, a total enrollment of about 750, and next year will



Above: the well-planned arts and crafts room offers opportunities for experiences with many media: paint, clay, plaster, light metals, ceramics, etc.
Right: the school's woodworking shop, which, together with a general shop and a drafting room, comprises the school's industrial-arts department.





have almost its full complement of 1200 in the three classes. The contractor completed his work in June, 1958, and landscaping was done during the summer months.

Library: A Functional Room

Among the many special rooms provided, the library is certainly one of the most functional and appealing. In addition to the usual stacks and table seating for students, it has audio-visual, music listening, and conference rooms, and work space for the librarian. The cafeteria and student lounge are adjacent to form the center for school social activities. A large fireplace graces the student lounge.

A unique feature of the gymnasium and auditorium is that a single stage serves both rooms. The auditorium, seating 750 in theater type seats, was not planned to accommodate the entire student body nor to provide facilities for large crowds such as those at commencement exercises. At only \$1,500 additional cost for fireproof curtains, it was possible to open the stage to both rooms and double its use.

Vocal and instrumental music rooms and both wood and metal working shops are located near the auditorium and gymnasium to facilitate the work of these classes in connection with dramatic productions, assemblies and games. Their remoteness from the academic classrooms, combined with proper acoustical treatment, has largely eliminated the noise factor usually associated with such classes.

A group of 35 professors of school administration, who toured the building in the summer of 1957 while in conference at the University of Oregon, were unanimous in their agreement that it represented tremendous value for the cost. They commended its arrangement and the provisions which were made for low maintenance over the life of the building. To these favorable comments have since been added those of secondary school curriculum authorities who have declared that it is, indeed, a building well suited to the education of "future generations of space-minded American youth." Such commendation has made the school board and others responsible for planning the structure feel that it is, indeed, a building that will serve well for many years to come.

School transportation has exploded within the past ten years into an enormous operation.

Pointing up this rapid development as dramatically as any statistic is the fact that, presently, one out of every four students depends upon buses to get to and from school. Other statistics are as impressive: almost 11 million children are carried daily . . . in over 155 thousand buses . . . for a distance of over 1.35 billion miles annually . . . at a cost of some \$384 million . . . for the over 47,000 school districts which use buses.

Of the many causes for this startling expansion, two are basic: (1) the growing student population which has complicated every phase of school operation, and (2) the increasing rate of consolidation. Redistricting of school system boundaries has meant less schools with more students carried greater distances by more buses — creating tremendous pressure for school bus programs.

This pressure, heightened by the overall strain on the budget due to the needs for more teachers, classrooms, textbooks, etc., has created a serious, mushrooming problem: "standees." Since school buses and equipment are designed to protect and serve seated passengers, pupils standing in buses are potential victims of traffic hazards. A recent survey of school transportation, for instance, determined that only 14 states prohibit standees, while five states place limitations as to the number of pupils that may stand and 29 states permit standees by virtue of no regulations.

If for no other reason than the hazard of standees, school board members and administrators should evaluate their school bus programs frequently.

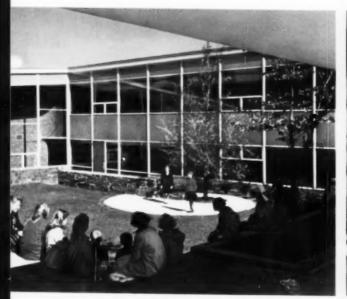
And to aid busy school officials combat the complexities of modern school transportation to form sound, realistic, and efficient policies, your JOURNAL presents the following survey: (1) a general guide with basic rules of thumb for achieving a quality bus program, (2) a report on one district's approach to a complete bus maintenance operation, (3) hints on how to buy more and better buses for your dollars, and (4) a list of free literature and other services pertaining to school buses and equipment available to school officials —



SCHOOL

TRANSPORTATION

This new motion picture may help you







build a fine new school



"In our time the verdict is clear . . . educate . . . and educate properly . . . or lose the race." The narrator speaks knowingly, and the people in front of the screen can't help but be impressed. Here is an intelligent motion picture that's helping to do a vital job—build better schools.

The title of the film is "Plan For Learning." It tells the story of how one community built the school it needed. It shows how the school board, the school superintendent, the architect, and the tax-paying community worked together to build a school that was big enough, attractive, and economical.

It wasn't an easy job. The film shows the arguments of people who opposed the construction of a new building and the logic that got it built. You will hear ideas that you may want to express some day . . . ideas that may help you build a better school.

The people in this story voted on the new school issue. "And so they built the new school," says the narrator. "They voted for colorful walls, for huge open windows . . . for bright functional classrooms. Most of all, they voted for the children."

This film was produced in cooperation with the American Institute of Architects and the American Association of School Administrators. Three members of each group served in an advisory capacity through all stages in developing the film. If you would like to show this film, send in the coupon below:

USS and Vitrenamel are registered trademarks





United States Steel Film Distribution Center Room 6001 525 William Penn Place Pittsburgh 30, Penna. I would like to show "Plan For Learning" to (type of group) on the following date: (preferred date and an alternate) be about people in the audience. Please send complete booking information. Name & Title Address City State (This film is available after July 1. There is no charge Viewing time: 27 minutes, 16 mm, color, sound)



Guides Toward Quality Bus Programs

The eyes of the five-year-old child are alive with anticipation, and her heart beats just a bit faster as she watches the big, yellow, eleven-ton school bus slow to a stop before her house. She smiles as she climbs aboard, responding to the driver's "Good Morning, Donna." Her school day has

A minute later the bus stops again; and a sixteen-year-old boy answers the driver's greeting with a "Hi." His school day has begun, too. And so it is with countless of thousands of others. It is safe to assume that the pupils transported on school buses have as much confidence in the driver and in the vehicle as they do in their classroom teacher and in their school building and that in centralized and consolidated schools transportation has become an integral part of the school system.

It is generally recognized that a safe. well-ordered transportation system results from a co-operative effort on the part of drivers, pupils, parents, teachers, administrators, and the board of education. The key persons, of course, are the drivers and the pupils. Boards of education are recognizing that the foundation of the really good school bus system is the adoption of a clear, concise, yet broad statement of policy. A second characteristic of the efficient transportation system is that of procedures: rules and regulations.

It is desirable to have these rules and regulations grow out of conferences, discussions, workshops, and other meetings of all the personnel concerned. These, too, should be simple, direct,

and few in number.

Most boards of education are including in their policy statement on transportation such items as purpose of the program, responsibilities of particular personnel (including selection, appointment, and training of drivers), safety precautions, transportation of resident and nonresident pupils, and limitations and possibilities resulting from the school's policy on field trips and to cocurricular activities. A basic consideration in the nature of the policy statement, too, will be the general physical characteristics of the school district.

The rules and regulations must be derived from the policy statement. They must spell out the "how-to-do-it" phase of transportation and should be as all inclusive as possible. They must also lend themselves easily to modification and to refinement, as must the policy statement.

Chief school officers, who are in almost every centralized and consolidated school system ultimately responsible for the quality of the program, are giving increased thought to broader personnelparticipation as well as to a systemized

Driver Selection, Appointment, Training

Among some of the generally accepted rules of thumb the following regulations are important in a quality school bus program.

Good Drivers

key to a safe and effective school bus program -

sands of buses will be readied to transport our boys and girls. During the summer many of these buses will be painted and put in the finest possible mechanical order. By September the majority will have been safety-checked and certified as ready for service. Parents will sigh with relief as the familiar bus comes down the highway, stops, and their youngsters board it. Another summer is over and the children are safely off to school again.

During the coming summer months throughout our land thou-

But wait a moment, did I say safely? Well, yes, in many cases this will be true. In others, quite tragically this will not be so. True, the buses will have been checked and found to be in good operational order. But what about the drivers. Will they be in top physical condition and will they be mentally alert, ready to handle the unexpected crises that will arise? Are they the types of individuals that you would entrust your own children's lives to twice daily during the coming nine months?

Few states require any special training or even licensing for school bus drivers. In many cases, they are persons who are

LAWRENCE H. ANDERSON

Area Co-ordinator of Teacher Education, Michigan State University, East, Lansing

HOWARD H. MOSHER

Supervising Principal, Cato-Meridian Central School, Cato, New York

1. Screening of applicants to be done by the chief school officer with the assistance of the transportation manager.

Interviewing to be structured so as to enable the interviewer to evaluate the candidates maturity of judgment and his ability to deal with people generally.

3. Instruction in operating the bus over the route to be driven.

4. Filing of the results of a physical examination which should place emphasis on heart, blood-pressure, eyes, and hearing among other things.

5. Conference with school personnel to orient the driver to his "commodity."

 Discussion and interpretation, with the drivers, of the board of education policy and the printed rules and regulation.

7. Recommendation by the chief school officer to the board of education.

8. Appointment by formal resolution of the board of education.

9. Written notice of appointment to the driver.

10. Observation of the driver in on-thejob situations.

11. Bus driver clinics and schools on a county or an area basis, and workshops on a district basis,

12. An active file of applications for bus driver's positions.

Pupils, Teachers, Parents

1. Bus safety drills to include practice in the use of the emergency door and the emergency, push-out window, the drivers green light, fire extinguisher, first aid kit, ax, etc.

An assembly program dealing in detail with expectations concerning behavior patterns, responsibilities of older pupils,

3. A teaching-learning unit, geared to the appropriate grade levels, dealing with bus safety and responsibility.

 Policy in handling behavior problems (must be understood and accepted by drivers, pupils, and parents).

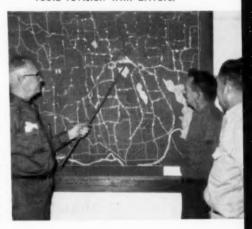
5. Mechanics for communication among all personnel involved should be simple and effective. (Among the blanks, forms, and other printed material which would expedite this might be included application blanks; physical examination forms; driving skill check list; pupil behavior referral blanks; bus safety units; bus maintenance referral forms; trip sheets; mechanics' job sheets; route and pick-up forms, and finally, printed policy and printed rules and regulations.)

Notes for the Administrator

School administrators who ride the buses from time-to-time, who hold drivers' conferences and workshops, who can discuss problems with drivers and pupils, and who study routing will have fewer problems than might otherwise be the case. Also, school administrators who recognize that the competence of the driver and the co-operation of the pupil and the parent are in direct proportion to the degree of planning and to the quality of the inservice training of all personnel will have developed a quality bus program.



Above: a familiar sight on the American scene, the fleet "lining up" in front of a school. Below: the transportation manager of the Cato-Meridan, N. Y., schools discusses a route revision with drivers.



"available" because their normal work schedule permits flexibility or they have no other job. Their chief prerequisite seems to be a willingness to take on a part-time job. Many times they are not physically capable of holding down a full-time job yet they contract to drive a bus load of youngsters — a man-sized job for a person in the best of health.

Perhaps some of these drivers (a surprising number are women) are quite capable of handling buses under normal conditions. What happens though, when the weather becomes inclement and driving is hazardous? Do they have enough reserve strength or stamina, and are they levelheaded enough to cope with the unexpected? Many of them are, but an alarming number have ailments that would be a deterrent to quick action in an emergency—and emergencies have a way of cropping up where youngsters are.

Even such a routine task as changing a tire requires considerable physical strength on an average-sized bus. Coupled with this is the responsibility of controlling 30 or more youngsters while they are performing the task. This latter job is no slight matter to

which any teacher can attest.

Certainly a word of praise is in order for the many fine hard-working men and women who toil long, often thankless hours as school bus drivers. Too often we in education fail to give them their due reward for their share in the educational process. In many cases, they are associating with the pupils for longer periods each day than any teacher in the system. Surely, they are making a contribution to the education of boys and girls. Yet we must be realistic enough to accept the fact that there are still large numbers of these individuals who are not equal to the responsibility.

The next time board members vote to purchase a bus for several thousand dollars let's make sure a driver worthy of the investment involved is hired. Perhaps with an in-service training program and a thorough yearly physical examination by a competent physician, drivers can perform satisfactorily. If not, we should declare them incompetent and replace them with competent persons. Let's give at least as much attention to our drivers as we do to the buses they handle.



A School Bus Maintenance Program

GEO. H. WATSON

Birmingham, Ala.

Operating and maintaining its fleet of 167 school buses is big business for the Jefferson County, Ala., board of education. The buses serve 40 schools outside the city limits of Birmingham, transporting some 19,000 students for a total of 1,250,000 miles per year. In spite of this volume, the system has never had a fatality caused by a school bus wreck.

Few school systems have a more airtight system of preventive maintenance or does more of its own repair work. Just about everything is done in the system's own shops except grinding crankshafts.

In addition to the drivers, the school transportation department is carried on by an organization of about 20 persons. This includes a director of transportation, Mr. C. M. Self, an area supervisor, a director of the central shop, 10 mechanics, two body-repair men, a tirerepair man, a lubrication man, two helpers, a stock clerk, and a secretary.

The repair building, located in Birmingham, is departmentalized. It includes a body shop, a motor rebuilding shop, and a carburetor and ignition department. A stock of rebuilt motors as well as some new motors are kept on hand ready to dispatch to a truck that may have serious trouble. Radiators are rebuilt in the carburetor and ignition shop; reupholstery is done in the body shop as is springwork and re-lettering.

While the repair shop building is not elaborate, it adequately houses the many thousand dollars' worth of tools and equipment needed for such a repair program. Since buses take so much room, some of the repair work is done outside, adjacent to the shops. This is permitted by the comparatively mild weather of the region.

It is during the summer that a complete overhaul program is carried out on the buses, getting them in shape for another school year. Engine, brakes, tires, lights, paint, windows, upholstery all come in for inspection, and when necessary, repair. This summer maintenance job "catches trouble before trouble happens" and eliminates some of the service calls that would otherwise develop during the next school year.

Director Self gives credit to the "area mechanic" system for much of the smooth running nature of the fleet of buses during the school season. These mechanics are stragetically located and subject to call all during the day. If the driver has bus trouble he can't remedy. he calls the "roving mechanic" who is there in a jiffy with his repair shop. More often than not the trouble is minor: a loose battery cable, a bad spark plug, or something else that can be easily fixed. Sometimes the mechanic does the work while the bus is parked, either at the school or at the driver's home after hours. If serious trouble develops that cannot be fixed in the field, then the truck is driven (or towed) into the central shop and a replacement dispatched to the route. In such a case the area mechanic usually goes along with the bus.

The budget of the transportation department of the Jefferson county schools for the 1957–58 year was \$275,275. Since the department is extremely cost conscious, careful records are kept on all repair operations to arrive at the cost of tires, parts, etc., and to determine which makes and models are giving the best service.

Each time a repair is made on a vehicle, its number is listed together with the hours worked, parts used, and name of the mechanic doing the work. Such sheets give a complete history of each truck. At any time the department can tell you where a tire is located on a truck, the serial number, make, and how many times it has been recapped. A recapped tire will give many times as long service as before and a tire may be recapped at least twice.

Needless to say the department's record system has practically eliminated thefts. Incidentally, in addition to manufacturers' markings, all tires are also branded. The County Superintendent of Education, Fred Simmons, gives Mr. Self credit for practically eliminating vandalism on the buses. It used to



A supervisor and mechanic check over buses for major summer maintenance items.



Director of transportation, C. M. Self, discusses a problem with the foreman of the carburetor and ignition shop.



A view of the Jefferson County school's central maintenance shop.

take a full-time man in the upholstery shop to repair damaged seats and upholstery, but there is very little of this now. In order to track down this vandalism, Mr. Self said it was necessary to work closely with the driver and principal and to do the "detective" work immediately after the damage is reported and not wait until the case is cold.

It might be mentioned that the bus repair shop also repairs lawn mowers, ditch diggers, and drag lines for the school system. Each school owns one or more lawn mowers and the heavier equipment is used by the board of education in some of its own construction projects.

All buses and major equipment items are bought on competitive bids, as this is considered the only defensible way to purchase. Standard brands of tires are also used. The general policy is to replace buses after 10 years of service, which would dictate the county into buying some 17 new buses each year. However, bus life cannot be rigidly defined in terms of years, but must finally be judged in the light of cost analysis. When a bus requires too many costly repairs, it is no longer able to give service. In this respect the county keeps a much more complete record system than the average fleet operator.

The school principal has an important part in the school transportation system. He is directly responsible for those buses and bus drivers whose bus routes terminate at his school and for area mechanics stationed at the school. He is responsible for checking and approving the mechanic's weekly reports. He also has general supervision over routes and none can be changed without his permission.

School bus routes average about 35 miles in length. No run lasts more than an hour and 15 minutes — the drivers try to have the children riding less than an hour. No pickups are made before 7 A.M.

One half of the 167 drivers make more than one trip in the morning and again in the afternoon. In this case, the trips are about 30 minutes long.

The driver, as an important cog in the transportation machine, is selected most carefully. A training school is held for him each summer. The drivers are paid \$70 to \$80 a month, depending on service. Each driver has an assistant who acts as monitor on the bus and as lookout at railroad crossings. He is next in line for the driver's job and is only paid when he does substitute driving. There is very little turnover in adult drivers in Jefferson county. For instance, this year there are less than 10 new drivers. They mostly replace those who reached the mandatory retirement age.

Hints on Better School Bus Purchasing

R. H. PARADISE

President, Schoolway Transportation Co., Inc., Hales Corners, Wis.

In most school districts, the school bus represents the largest single item to be purchased. School boards, in their efforts to relieve as much strain as possible from the taxpayers of their districts, should not overlook improved methods of school bus purchasing to realize considerable savings. And a well-conceived program of buying buses must involve the following basic factors:

 School buses should be purchased on competitive bids filed on detailed specifications. 2. In many cases old buses can generally be sold outright to a better advantage than they can be traded on the purchase of new equipment.

3. A long-term purchasing plan should be adopted so the school board will not be called upon to purchase several buses in one year. If seven buses are operated by the district, arrange purchasing plan so only one new replacement is needed each year.

4. Many school boards have indicated that there seems to be very little difference between the quality of ap-

five steps toward school bus savings

Have a separate bid opening for chassis only. Chassis are to be quoted F.O.B. factory.

Have a separate bid opening for school bus bodies only, and let the school bus salesman deal directly with the school board. (This can be done by mail.) The school board can save up to 20 per cent on the purchase of a new school bus body. Body to be quoted F.O.B. factory!

Selection of school bus body to be made first. Selection of chassis to be made second; chassis manufacturer to deliver chassis to school bus body factory. Completed unit will be delivered to school by body manufacturer.

Freight charges for handling of chassis between manufacturer and body plant are established, and should a school board wish to include it, they could obtain the exact figure at the time of writing the order and include same with their purchase. These rates are standard by the people who render such service.

Body and chassis specifications, as a whole, should be kept to minimums leaving an allowance for manufacturers to better their products and make improvements from year to year. Most states have established their minimum standards, and it would be well for those purchasing buses to adopt National School Bus Regulations, Revised 1958, and then point out certain specifications.

proved bus bodies if they are bought on the same definite, clear-cut specifications. Therefore, there should be only a slight difference in the bid prices for

similar equipment.

5. If the school bus is to be used extensively for extracurricular activity trips, consideration should be given to such factors as additional space between seats (possibly 27 to 30 inches), better quality of seats, luggage carriers mounted on the roof of the bus, etc.

6. Frequently school boards make a mistake by purchasing school bus chassis which are too small. Consequently, the motor is laboring most of the time and, as a result, the operating and maintenance cost becomes extremely high.

7. The average cost per pupil for transportation is usually less with buses with pupil seating capacities of 48, 54, and 60 than with the smaller vehicles. However, adequacy and efficiency should not be sacrificed for the sake of economy.

The Care for "Separated" Purchasing

In addition, the school board should investigate the value of buying chassis and bus bodies separately. Our experience verifies the fact that school bus salesmen normally sell such items as truck dump bodies and utility bodies to the automative dealers. By selling school bus bodies, they increase their line of products, making it more advantageous to call on automobile dealers. One can readily understand that it would not be desirable for school bus salesmen to sell school bus bodies separately when they rely upon truck salesmen to assist them in selling the other products which they represent.

When a school board advertises to purchase school buses, school bus salesmen have to rely solely upon the truck salesmen, the distributors, in presenting the body prices. The truck salesmen, in submitting their prices, may quote one body price higher than another in different bids for various reasons. The school bus body salesmen as "middle men," have no control over this. Records of a Midwestern state reveal that the same bus bodies bought in different counties of the state were sold for much higher or lower prices with specifications being equal.

School bus bodies can be purchased for approximately ten per cent less when they are bought directly from school bus salesmen who do not have to work

through an automobile dealer.

Finally, there are two current trends relative to school bus purchasing. First, there is a tendency to purchase heavier vehicles, especially where the terrain is rugged. Secondly, for the sake of economy 54- and 60-passenger school buses are replacing some of the vehicles of smaller capacity if these larger

Free Aids for Better School Bus Program Buying

School bus business is big business as indicated by the fact that last year almost 6000 new buses and 360,000 new bus tires were purchased. To help school board members and administrators get as much service as possible from each limited school transportation dollar, the following literature and other services are offered without cost by our advertisers in the field. To get the material you'd like promptly and conveniently, circle the key numbers listed below with a description of each offer on the "Reader's Service Section" index card on page 73 of your JOURNAL. Detach and mail the addressed, postpaid card and your order will be sent to you.

AIR BRAKES

Their Safety Is in Your Hands, Bendix-Westinghouse, a booklet describing the advantages of air brakes to school buses. (For your copy, please circle ST-1 on the "Reader's Service Section" card on page 73 of your Journal.)

Maintenance Manual, Bendix-Westinghouse, a 16-page, illustrated explanation of "The Fundamental of Brakes, of Compressed Air, of Compressed Air Brakes." (For your copy, circle ST-2.)

For Greater Stop-Ability, Bendix-Westinghouse, a leaflet outlining reasons why air brakes mean greater safety in modern traffic. (ST-3)

Film, Bendix-Westinghouse, 22-minute, sound, black-and-white film on air brakes, their operation and maintenance, depicting flow and passage of air during the various phases of the valves and units of air actuated brakes. Available on a loan basis. (ST-4)

BUSES

Catalog, Chevrolet Motor Division, General Motors Corp., an illustrated description of Chevrolet model school bus chassis and bodies with detailed specifications. (ST-5)

Catalog, Dodge Division, Chrysler Corp., general information and detailed specifications, well illustrated, about Dodge chassis and body bus models. (ST-6)

Operating Record, Dodge, a handy record book designed to facilitate accurate recording of work done (mileage, hours, stops, trips, loads, wages, etc.) and expenditures (gas, oil, repair and maintenance, etc.) of individual buses. (ST-7)

TIRES

Folder C-908-0, Firestone Tire and Rubber Company, with information on tires, type of services, sizes, ply ratings, rim sizes, loads, and inflations. (ST-8)

Portfolio, Goodyear Tire and Rubber Company, data on Steel Grip, Extra-Grip, Cross Rib, Super Road Lug tires with construction details, load and inflation data, etc. (ST-9)

vehicles can be utilized without sacrificing adequacy and efficiency.

One principal summed up these trends in a recent letter: "Two years ago I started changing over to heavier equipment, buying 54-passenger jobs with the two-ton chassis and two-speed axles. We have three of these units and I believe that they make the ideal buses for economy purposes."





Ramapo's school lunch employee class considers (above) the capacities of steamer and ovens and (left) practices assembly of machines, a prime factor in accident prevention.

A Training Program for Lunch Employees

How this program is a major contribution to providing healthy, appealing school lunches—

MERRILL L. COLTON and BARBARA HURLEY

Providing an adequate school lunch program for a rapidly growing student population, now totaling 4500, can pose real and urgent problems. This is especially true when circumstances dictate the housing of children in 12 locations. The kitchens in use vary from carefully planned, newly equipped units to the improvised cooking areas of older schools. Originally some of these older units were organized by community-minded parents who volunteered to provide a hot dish for the children's lunch.

With the encouragement of the board of education and the administration, the supervisor of the school lunch program established two main goals: (1) to provide a nutritionally sound lunch to all school children and (2) to make the school lunch an effective part of the children's education.

A major factor in implementing these objectives has been the development, over a three-year period, of a basic employee training program. For one week prior to the opening of school, all school lunch personnel participate in an intensive course of study and practice which is continued in monthly evening staff meetings, scheduled afternoon sections of specialized workers, day-long workshops (simultaneously with teachers' conferences), and occasional field trips. Optional in-service training courses

are also offered in particular skills; these are open both to employees and to the public. The effectiveness of the program is indicated by a steady increase in student participation, good staff morale, attractive and, taste-tempting meals, and wide public acceptance.

In our situation, where close personal supervision of ten operating kitchens is a physical impossibility, it is essential that the head cook in each kitchen be not only a competent, well-trained, informed individual but also that she be dedicated to the aims of the school lunch program on the national, state, and local level. New employees soon learn from old that the same spirit of service that prevailed during the years of volunteer food preparation in our schools is in effect today. Interest in children and in food preparation for them is the underlying theme of the entire training program, and is the reason for per-

Dr. Colton is superintendent of schools of the Ramapo Central School District No. 2, and **Mrs. Hurley** is the supervisor of the district's school lunch program.

fecting old methods and developing and learning new.

Areas covered during the year can be loosely divided into the following categories: sanitation, food preparation, storage, health and safety, human relations, use and maintenance of equipment, work techniques, and accurate reporting. These are presented by lectures, demonstrations, visual aids, skits, discussions, and written tests. Every employee is also issued a manual containing fact sheets in each of the above fields, outlines of lectures, specifications of food and equipment, and instructions for specific operations. As pertinent information accumulates, pages are added and thus the manual serves as ready reference as well as a resource book for future training schools.

Each area of study receives due attention, both in new material offered and review of previous lessons. Moreover, each year one topical problem of district-wide scope is subjected to specialized study. The field of concentration in 1957–58 was teaching the head and assistant cooks to use the Training—Within—Industry (T.W.I.) method in instructing new members of the rapidly growing staff. These key people gained practice by instructing each other

(Concluded on page 69)

WORD FROM WASHINGTON

Administration of Defense Education Law Still Controversial

ELAINE EXTON

What was the real intent of Congress in passing the National Defense Education Act? The declaration of policy of the Act states: "The defense of this Nation depends upon the mastery of modern techniques developed from complex scientific principles. . . . This requires programs that . . . will correct as rapidly as possible the existing imbalances in our educational programs which have led to an insufficient proportion of our population educated in science. mathematics, and modern foreign languages and trained in technology. . . . The national interest requires that the Federal Government give assistance for programs which are important to our defense."

Purpose Disputed

Did the majority of the House members voting for this legislation do so because they shared the view expressed by Congressman Carl Elliott (D., Ala.), the chairman of their Special Education Subcommittee, who is leading the floor fight for its enactment said "there is a real good reason for each title in the bill . . . each has its place . . . and will serve a very worthy purpose in doing what we want to do for America, namely, to answer the Soviet threat to gain supremacy over us in science."

How widespread is the opinion aired by Congressman Frank Thompson (D., N. J.) that "the defense aspect of it was . . . a gimmick . . . a way for us to get it through Congress"?

He took this stand in voicing support for his new bill, H.R. 284, to amend the Defense Education Act to provide for 20,000 scholarships to be awarded students with academic training in other fields as well as math and science.

Testifying at hearings held in February

by the Education Subcommittees of the House to review how the administration of the Defense Education Act is proceeding, he recalled that his "original preference . . . was that it be called National Education Act, remarking: "I viewed the legislation as in a sense, in the best sense of the word, a gimmick. We had to sell it to a normally hostile Congress. . . Now that the nose is in the tent, I think that we could perhaps straighten out some of the imbalances which are in it."

The split concerning the main purpose of Public Law 864 evidenced in these divergent viewpoints continues to fan debate on whether the administrative pattern chosen by U. S. Office of Education officials to carry out the Act and some of their selection of personnel to operate it make of the legislation a general aid-to-education measure rather than emphasizing its defense-related goals.

Opinion also divides on whether Office of Education actions have influenced the implementation of the program by state departments of education toward a generalist approach encouraging the use of generalists to staff the consultative and supervisory positions to be aided under Title III in preference to specialists "in the fields of science, mathematics, and modern foreign languages" named in the Act.

Federal Control an Issue

Deepening the controversy is the objection of many educational leaders to the Defense Education law on the grounds its very nature makes it federal control legislation in that Congress has specified that the federal money authorized be used for certain aspects of the curriculum—such as science, math, and modern foreign languages, guidance and counseling—which

have been chosen by the Congress as necessary to national defense rather than providing general financial aid for the educational programs determined by state and local school authorities.

Interestingly, in a recent appearance before the House Subcommittees on Education, Lawrence Derthick, the Federal Commissioner of Education, told their members "as I have gone about the country I have referred to these two subcommittees as our board of education. . . . We have been very proud of our board of education and the high purpose of these two subcommittees in advancing the passage and working out the creation of the National Defense Education Act. . . . From the very outset we have felt very keenly our responsibility to you. We have sought to carry out the wishes and intent of the subcommittees."

Even some of the spokesmen for national organizations which have been stanch supporters of federal aid for schools have questioned the extent to which the National Government is influencing local education through the Act's administration.

While some educators claim this is due to features "built in" to the law itself and its "special aid" provisions entailing federal regulations and administrative machinery to make sure the federal dollars are spent for the Act's "federally defined specific purposes," still others are now less certain as a result of the initial operation of the Defense Education Act that large amounts of federal funds can be used for education without creating a stronger central authority in Washington which may encroach on state and local educational prerogatives.

Difficulties Described

In testimony before the Subcommittee on General Education in the House, Edgar Fuller, speaking for the National Council of Chief State School Officers, read into the record the following letter sent to the U. S. Commissioner of Education by James E. Allen, Jr., the Commissioner of Education for the state of New York, which he characterized as "a moderate statement that would represent just about the middle of the road opinion of 49 chief state school officers":

We feel that we are making progress in the administration of the provisions of the Act, but I must say that I have my reservations about the pattern that this Act may set in terms of future federal-state relationships in education. My colleagues in the New York State Education Department have been somewhat overwhelmed with the mass of specifications, regulations, and detail concerned with the preparation and approval of our state plans.

We have had marvelous co-operation and assistance from you and your colleagues in the U. S. Office of Education. Nevertheless we wonder whether the provisions of the Act itself and the volume of regulations issued in connection with its administration are not tending to establish a type of federal control which was the very thing all of us. including Congress, hoped to avoid.

Although praising Secretary of Health, Education, and Welfare Flemming and U. S. Commissioner of Education Derthick and their staffs, who he said "are doing their job as well as any group of administrators could," Dr. Fuller explained "there is a great deal of discomfort and a great deal of frustration and a great deal of difficulty in hiring personnel and all the rest in placing some titles of the National Defense Education Act in effect in the states. . . . Several have said in regard to certain titles in negotiating state plans that they would rather not have it at all than have it the way they were told they would have to have it.

Drawing on what "the chief state school officers have learned about federal control in implementing the National Defense Education Act of 1958," Dr. Fuller informed the Education Subcommittee of the Senate that the general "no federal control" clause which is incorporated in many federal laws "has to give way to the specific requirements in the statute in the hierarchy of legal values."

Holding that "federal controls are creeping in at the insistence of the Bureau of the Budget," he maintained "when there is written into a law phrases or clauses which require interpretation by the lawyers in the Health, Education, and Welfare Department, and further interpretation by the lawyers, the auditors, and the accountants in the Bureau of the Budget, these federal regulations have the force of federal law and not only do they have the force of federal law generally, but they have the force of federal law specifically taking precedence over any general 'no federal control' clause."

The difficulties that have taught the lessons to the chief state school officers, he added, "are found in the law itself, as interpreted, but not necessarily in the law itself as some of us would read it at first."

In an appearance before the Senate Subcommittee on Education a few days later when questioned about the possibility of federal control through the National Defense Education legislation, U. S. Commissioner of Education Derthick answered "it seems to us that in administering this program through state plans which the states devised, we are indeed keeping the control at the state level and not at the federal level."

Regional Field Positions

Besides the regulations for administering the law whose drafting and interpretation by the Department of Health, Education, and Welfare lawyers has been drawing fire, another bone of contention being pushed at the Departmental level is the proposal to station general educators in the nine Regional Offices of the Department located in Boston, New York City, Charlottesville, Va., Chicago, Atlanta, Kansas City, Mo., Dallas, Denver, and San Francisco.

This move which has been resisted by

Federal Commissioners of Education in the past and is opposed by many prominent educators as a step leading in the direction of federal control may soon become a reality under the guise of added needs for service stemming from pressures of the Defense Education Act, although the law itself contains no mention of such a possibility and carries no specific authorization for it.

However, funds for 102 regional positions for educational programs are requested in the HEW Department's fiscal 1960 budget, including clerical workers. Besides the 66 field employees (an increase of 10 over fiscal 1959) for the school assistance program in federally affected areas which has had representatives stationed in the HEW Regional Offices since 1950, this figure includes 18 new positions for Higher Education (Defense) and 18 new positions for Regional Operations (Defense).

According to the justification in the Supplemental Appropriations Hearings "the National Defense Education Act will require the establishment of representatives in (the Department of Health, Education, and Welfare) regional offices to represent the Office of Education, to provide over-all field co-ordination and leadership, and assist in direct implementation of the Act.

"These regional representatives will conduct liaison with state educational agencies to assure the adequacy of Office services and render special services as required.... It is now obvious that continued reliance on services out of Washington to program participants in the field would be ineffective."

Alert to the possibility of such a request the Council of Chief State School Officers at its annual meeting in Chicago in November, 1958, expressed disapproval of such a development in the following terms: "We believe any plan to establish Office of Education personnel in the regional offices of the HEW Department to work with state and local educational agencies will delay action, create confusion, add unnecessary expenses, and undermine the maintenance of sound federal-state relationships in education."

This action was duly reported to Secretary of Health, Education, and Welfare Flemming and Commissioner of Education Derthick. In notifying the organization that the Department would go forward with its plans to assign a general educator (not a specialist in the academic disciplines to be bolstered by the NDEA law) to each HEW Regional Office, these officials declared there would be no interference with the state department of education relationships with Washington.

Wrote Commissioner of Education Lawrence Derthick: "Our relationships and our channels of communication with state departments of education would remain on exactly the same basis, except that we would have a generalist who while serving the interests of the Department and all of

its agencies in the regional offices would, in addition, be able to strengthen the bonds of communication and partnership by rendering assistance on the spot in much the same manner that our other staff renders services through field trips from Washington."

Expanding Federal Powers

Another focus for discussion is whether the intent of Congress as incorporated in the language of Public Law 864 is to "provide consultation and technical assistance" by those who are administering the Act.

Debate continues on the issue of whether the Office of Education is exceeding the provisions of the law by rendering consultative services to the states on curriculum and instructional matters through the employment of specialists in the Aid to State and Local Schools Branch responsible for the approval of state plans and money grants for Titles III and V.

In the opinion of some educators this is specifically forbidden in Section 102 of Public Law 864 which states: "Nothing contained in this Act shall be construed to authorize any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over the curriculum, program of instruction, administration, or personnel of any educational institution or school system."

It is also questioned whether it is sound administrative practice or an efficient use of federal funds to employ a professional staff in the new aids unit whose functions overlap and duplicate the services now being furnished by specialists in the Office of Education's Instruction, Organization, and Services Branch which has been an established part of the Office program and has had cordial working relations with the states for many years. For example, the Aid to State and Local Schools Branch is planning a series of conferences for statelevel supervisors, a function which has normally been in the Instruction, Organization, and Services Branch.

A Growing Bureaucracy

Although Office of Education officials have indicated in testimony before the House Special Subcommittee on Deficiency Appropriations that to administer the National Defense Education Act "new functions were merged with existing units to the extent possible in order to avoid unnecessary creation of new administrative superstructure," some educators argue that the organizational pattern adopted has led to setting up in four different divisions of the Office elaborate administrative machinery operating through eight new sections and four branches seeking a large number of new employees.

If Congress actually provides the full number of new positions that the Office of Education has requested for National Defense Education Activities, its total number of employees will rise to 1022.

Surveying School Scene

How Minneapolis Upgraded Its High Schools

A four-point secondary program aimed at challenging top students and at enabling all pupils to get more out of their training uses enrichment, credit flexibility. counseling . . .

A secondary program, aimed at challenging top students and enabling every student to profit more from high school training, has been adopted by the Minneapolis, Minn., board of education. Among the major features: 1. More grouping of students into slow,

average, and fast classes.

High school graduation diplomas that record the quality of work done (honors, regular, and minimum).

3. Stiffer graduation requirements

4. More homework and eventual replacement of large study halls by smaller supervised study groups for specific subjects.

Other features: exceptional students would be permitted to take enriched courses (including some on the college level); slower sections for students unable to maintain a normal learning pace; special groupings by interest and ability in certain subjects for average students.

Under the plan, a flexible system of credits would be based on mastery of content rather than on fixed amount of time spent on a subject. Students would be required to take special science courses in the 10th, 11th, and 12th grades and at least two of 15 elective courses in mathematics, science, or foreign languages. They would also have to pass a "minimum competency" test in arithmetic before graduation.

Because individual programming would be the key to success of the proposed study revisions, superintendent Rufus A. Putnam hoped that the present ratio of one counselor to 600 students could be increased to 300 or

400 students per counselor.

Measuring Teaching Load in Secondary Schools Which subjects in high schools are more difficult to teach was determined in this study to aid in distributing the instructional load . . .

Improved methods of instruction in the different school subjects have added con-siderably to the work of teachers, with but little attention being given to the difficulty of teaching one subject as related to others. Five or six classes daily, assigned to teachers for all types of subjects, cannot be considered a fair distribution of the instruction

In order to make a comparative study of the load entailed in teaching the various subjects, the Bureau of Teacher Service at the University of Washington, with the assistance of Thomas E. Cole, educational consultant, conducted a study of the instructional items involved in each subject, as outlined by a group of administrators and teachers.

The study had two objectives: (1) to grade each subject on the instructional items in order of difficulty; and (2) to compare one subject with the others, taking into considera-

tion the items in the first study.

In order to evaluate the teaching process, the study was limited to five distinct phases: (1) preparation necessary in preparing lesson; (2) collection, care, and arrangement of equipment; (3) presentation and class instruction; (4) evaluation of results of student accomplishment; (5) provision for individual instruction and conferences.

The study sought to compare the average rank difficulty of each phase of instruction in each high school subject. A number of specialists were assigned to make the rank-ings. Judgments of the rank difficulty of each phase were made by 75 high school teachers in a large city system, 23 students in graduate classes in administration, and a number of teachers in the smaller cities and towns.

Following the study, it was decided that

class instruction is the most difficult phase with an average rank of 4.5. Other phases that newer methods have not diminished the effort given to class instruction which ranked most difficult, in 9 out of 15 subjects. Preparation was ranked most difficult in 5 subjects, and evaluating results in 1. The difficulty value assigned to preparation was not related to the teacher's difficulty in learning the subject but to the energy required to plan the work for daily presentation.

The average rating for each subject decreased in the following order: science, 4.2; home economics and manual arts, 4.0; typing, 3.6; American history, 3.2; foreign languages and world history, 3.0; stenography, 2.6. Science is twice as difficult as stenography when both classes are of normal size. Adjustment must be made in each phase of instruction for

oversize or undersize classes.

The study made no attempt to measure services rendered the school by the teacher other than that of instruction. An attempt to use scales for measuring teacher load should take into account what the teacher should be doing, as well as what he is doing. Modern devices for measuring teaching load requires a relative difficulty value for each phase of the teaching process. The range of difficulty between classes is quite wide, even though the class size is kept constant.

What are the Trends in Department Chairmen? Many high schools have abandoned departments heads and others have adopted this system. Here are the results of a study of their status . .

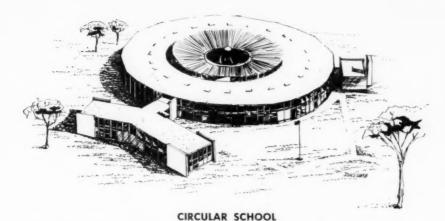
Following the study, it was decided that class instruction is the most difficult phase with an average rank of 4.5. Other phases

The status of department heads in public high schools has been one of fluctuation and change during the past thirty years. Through



WADSWORTH BOARD IMPROVING THE CURRICULUM

Engaged in developing a curriculum improvement and building expansion programs, the Wadsworth, Ohio, board of education recently employed a director of curriculum, who is planning an expanded course of study, and is completing a new elementary school building as well as preparing to take bids on a new senior high school to house 750 pupils. Members of the board include, from left to right: W. L. Heyl, clerk-treasurer; M. H. Burkholder, superintendent; M. F. Yelinek; Dr. L. C. Kreider; J. D. Miller; R. W. Bucher, vice-president; Dr. D. O. Wearstler, president.



In Mount Morris, Mich., a new circular-shaped senior high school, commonly called "The Magic Circle School of Tomorrow," was occupied last fall. The structure, of steel and glass with a area of 72,000 square feet, cost \$1 million. The building is nearly a "perfect circle," 220 feet in diameter, and two stories high. The vocational areas are on the first level, along with the central gymnasium-auditorium which seats 1000, and the academic areas are located on the second level. A "T"-shaped corridor joins the classroom wing with

the administration wing. The architects, Belli and Belli, Chicago, Ill., planned the school for a 750-student capacity. Superintendent at Mount Morris is C. F. Scharer.

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yearly basis, as follows: (a) dramatics, \$100 to \$150 per play; (b) annual, \$100 to \$150 per year; (c) industrial arts, \$200 to \$400 per year; (d) forensics, \$150 to \$200 per year; (e) Pep Club, \$200 to \$300 per year; (f) driver training, \$300 to \$450 per semester.

these years, some schools have abandoned the practice of maintaining department heads, while others have adopted the plan.

In order to determine what is being done generally in relation to high school depart-decreased in difficulty. The results indicated ment heads, James V. Moon, superintendent of schools in Rochester, Minn., and Fred M. King, director of instruction, conducted a survey in May and June of 1958. The data was obtained from a questionnaire sent to 208 cities of the nation, including 96 to the two largest cities of each state, 63 to Minnesota secondary schools with enrollments of 750 students, 38 to outstanding high schools listed by *Time* magazine, and 11 to other large high schools scattered throughout the country.

The replies to the questionnaire indicated that in 126 high schools a system of department heads is maintained, but in 57 schools the practice is not followed. In 56 high schools having no department head, curricular work is planned largely by 31 principals. Administrative details of each department in the 56 schools are handled by the principal or assistant principal in 40 cases, by the annual chairman in 11 cases, and by the assistant superintendent in five cases.

In many schools where department heads are serving a purpose, the heads are provided with a lighter teaching load or with extra pay. It was found that in 66 schools there are lighter teaching loads, while in 59 cases the heads do no teaching.

In 65 schools extra compensation is provided, while in 60 schools it is not the case. The nature of the amount of extra compensation for department heads maintains no set pattern. Most schools reported amounts paid as ranging between \$100 and \$500 per year. In one case there was a \$2,000 differential. A total of 32 schools paid from \$100

to \$500; eight schools paid \$600 to \$1,000; two schools paid \$1,100 to \$1,500; and one school paid \$1,600 to \$2,000.

Some high schools have an arrangement for combining the activities of several areas under one department. Some of the combinations are: science and mathematics, six; industrial arts and home economics, four; English and history, two; health and physical education, one; science and health, one; fine and practical arts, one.

Administrator Salaries

In Lamar, Colo., the board of education, with the co-operation of supt. Alfred R. Young and the school staff, recently completed a study of administrator salaries, setting up a salary scale for a two-year period.

The new schedule is of the single-salary type, and provides salary increments of \$400 to \$1,200 for administration, depending on assignment as elementary, junior, or senior school executives, plus \$2 to \$3 per month per teacher under their administration, in addition to the base pay.

The director of instruction is given a salary based upon the regular base pay, plus \$1.50 to \$2.50 per month per classroom teacher receiving direct aids from the department. Staff members in charge of music involving festivals and interschool contests are given increments to \$400 to \$500 for instrumental work, and \$300 to \$400 for yocal.

Sponsors in charge of extracurricular activities receive additional compensation on a

Parents Go to School by Bus

On opening day, parents of school children in the Princeton, N. J., township schools were invited to ride the same bus route which their children would ride for 180 days. Mrs. Bertha H. Eisenmann, superintendent of the Princeton township schools, conceived this novel way of introducting the parents to the ways of school buses. The owners of the bus lines co-operated in the experiment because they believed that it would ease some of the transportation problems faced each year. The run enabled each bus driver to locate the new homes and new children and to clear up many of the difficulties caused by new bus routings and changes in school assignments. The parents boarded the buses at the customary bus stops and they were able to judge the time of arrival of the bus at their stop and at the school.

Novel Windowless School

In Natchez, Miss., a unique type of high school building is being constructed by the school board. The school will have open corridors, no curtains, shades, or blinds, and will be erected in four-room units, with separate heating units for each four rooms. It will contain an auditorium, a cafeteria, a home economics suite, and a commercial department. The building, designed by architects R. W. Naef and George Booth, will be completed ready for use in September, 1959.

Role | of the Principal

in meeting increased enrollments

What can the secondary principal do to ease the current student bulge?

HERBERT H. HELBLE Principal, Senior High School Appleton, Wis. Within the next ten years secondary school enrollments are projected to grow from the present 7,422,000 pupils to an anticipated 11,890,000.

Within the next decade we shall need a total of 1,906,899 new teachers in elementary and secondary schools. The National Education Association estimates we shall need 1,000,200 new teachers and administrators by 1970. The total number of elementary and secondary school teachers, public and private, now employed totals 1,201,800.

Growth in American education is not recent or new. What is new at this particular time is the great increase in the rate of enrollment growth plus a critical shortage of qualified teachers.

Dr. Floyd Reeves has said that the capable executive divides his time into thirds: one third for internal supervision of cooperation, one third for external supervision (public relations), and one third to project the future. The last third is the most difficult. To project, and help shape, the future must be done before the twin problems of constantly increasing enrollments of pupils and decreasing supply of teachers meet head on.

But the two apparent irreconcilables of steadily increasing enrollments and a dwindling of qualified teachers are going to be difficult to solve. Money doesn't buy teacher services when teachers are non-existent. Unless our present patterns of recruiting, training, utilizing, and retaining qualified teachers are modified, it will be impossible to secure enough good teachers for our needs.

Getting Qualified Teachers

At present one fifth of all college graduates go into teaching. To meet our 1960 demands we shall need one-half. More than one half of the top-quarter in intelligence of our young people do not enter college. Since the total number women attending college may soon exceed the number of men enrolled, we may actually get more teachers in the next decade than most forecasts predict.

We could solve much of our problem in teaching and other hardpressed professions if we could induce more of these able young people to enroll in college. Financial inability and lack of interest are the two most important reasons why these high school graduates do not go to college. To what degree is the secondary school able to help here?

Perhaps we should try to get better utilization of our present teaching force To beat the teacher shortage, Bay City, Mich., pioneered with teacher aids on the elementary level. More than 25 Michigan cities experimented with this plan. Teacher aides there do nonteaching chores - collecting defense stamp and milk money, conducting reviews and tests, preparing bulletins, taking records of attendance and marks, correcting papers, etc. The 26 per cent of teaching time that had been occupied with these duties is now being devoted to the teaching act, and with larger classes. It is now planned to extend this experiment to a number of co-operating high schools in Michigan.

Where study halls cannot be abolished, perhaps the Bay City experience suggests such assistance. We could use parents or teachers who are not legally qualified to teach to administer these. This arrangement would free qualified teachers to teach. A local attempt to achieve this purpose in this manner several years ago was not successful. Perhaps non-teaching personnel can also take over discipline in corridors and at athletic contests, ticket selling and collecting, parking cars, and doing noon-hour duties on a part or full-time basis.

Some schools can partially abolish study halls and thus secure more teaching time for teachers as well as classroom space. Abolition of relatively short, double-period science or practical-arts classes in favor of a single, lengthened period also gains teacher-time and classroom space in the interest of more instruction for more pupils. Some schools have achieved the same purpose by these measures — replacing the six- or seven-period day with classes of one-hour duration and substituting an extended school day of nine or ten periods with class periods of 45 minutes each.

We may expect community pressures for

increased class size. Until such socioeconomic pressures materialize, schools will tend to follow their traditionally established class size policies. It is encouraging to know, however, that most communities are willing to go on half sessions, rent church basements, and even build new buildings before greatly changing established class size policies.

Maintaining morale - his own and that of the staff - will be one of the principal roles of the secondary school administrator in the days ahead. Better scheduling of classes to relieve teachers of large classes reduces pressures some teachers feel. Balancing the load of daily preparations will help. Assigning extra-class activities to put the drones to work by relieving the busy bees may be helpful. Reducing clerical and routine duties of teachers by providing such services through the office staff improves teacher morale. Only administration can give the help and support needed by teachers in some disciplinary cases. Preventing classroom interruptions improves the situation.

Compulsory, "sudden-death" retirement policies affecting teachers need revision to prolong professional life by gradual retirement of some of the most capable men and women.

Staff Orientation

Helping select and orient additional personnel—professional, clerical, and custodial—in the face of steadily bulging enrollments will tax the principal's capacities as a leader. He needs to familiarize himself with successful practices elsewhere; his particular situation, however, is always somewhat different and he will always have to do his planning and improvisation to meet local conditions.

The pre-school orientation workshop for teachers, new and old, is now quite commonly used to help assimilate and unify the staff. It may require evaluation and critical examination to keep the workshop vitalized. Similarly, preorientation of parents and pupils of elementary and junior high school about to enter the upper grades has proved valuable to all concerned.

Dean W. Mickelwait, principal of the high school at Eugene, Ore., speaking on this topic at the NASSP 1955 Annual Convention, discusses the ingenuity and flexibility the high school principal will need to use as zero hour creeps up.

He describes an existing building gradually filling up to capacity with both pupils and teachers; how cafeteria, study halls, storerooms, music space, and auditorium become multi-purpose rooms; how some teachers, like the pupils, have become "floating" teachers, or itinerants, who travel from room to room throughout the day until every room is used every hour every day. He is forced to inaugurate undesirable but inevitable stopgaps: an extended school day, staggered, halfday or double shifts, noon-hour classes and two or more lunch periods; two faculties; and finally, the least desirable palliative of all - putting the school on a quarter system with classes held the year-round, but with only three fourths of the student body in attendance at one time. How to operate this last dire, emergency "solution" except on a state-wide basis is the \$64,000 question.

When the time finally arrives to construct an addition to the high school or a new building, the findings of a recent conference of New England architects and school leaders

meeting at Harvard University offer challenging and provocative suggestions. Our secondary school administrator will then learn more about "wing-type" design, campus style, community-centered, and "umbrella-type" schools,

Increased Demands

Early identification plus enriching and enlarging the program of education seems to be current procedure to realize the objection to the identification and the special education of the gifted. Opportunities to exercise leadership, in and out of school, also seem to bring desired results.

What about the slow learners? Some high schools already give elementary and junior high school language-arts, natural sciences and social studies, and arithmetic. Nonacademics in practical arts, music, health, recreational activities, student government, co-curriculars and the like where these pupils can compete with brighter classmates and benefit from association with them, complete their program. For these individuals the right teachers are vital. Such teachers might be recruited from among successful elementary teachers, teachers particularly acquainted and skilled in dealing with slow and immature individuals. Classes here should not exceed 15 enrolled. For the slow learners we shall have to think through new concepts in scheduling classes, athletic eligibility, marking, credits, and graduation requirements; for the teachers, new patterns of in-service training and certification are

Larger enrollments will mean larger classes in many localities. Hence, we may expect that less individual attention can be given to pupils by teachers. This will require more homework by the pupil and more responsibility on the individual for promoting his own learning. All of this points up a sharpened need for increased and more effective guidance and counseling services in the secondary schools, particularly during the next decade.

The determined secondary school principal will constantly promote curricular revision with his staff in anticipation of swollen enrollments, some courses and units need to be recast or eliminated, and other added. Duplications such as economics in the social studies and in general business principles in the business department may need to be corrected, and certain health and first-aid units, often duplicated in biology, home nursing, home arts, health, and physical education may need revision.

The perplexed principal will need to consider the adoption of a differentiated graduation certificate, using one for those who have achieved success in their studies and a different one for those who have merely attended for three or four years. By changing graduation policies somewhat, he can encourage repeaters and nonworkers to leave, thus vacating much-needed space. He can help accelerate the gifted with extra courses, by giving standard tests for advanced credit, and by arranging summer school attendance and correspondence study.

What about educational television? There are now over 100 closed circuit television installations in universities, colleges, and public school systems in the United States. Station WQED in Pittsburgh has offered high school courses for credit toward a high school diploma. High schools in Columbus, Ohio, Vancouver, Wash., South Hamilton, Mass., and

Pocatello, Idaho, have such facilities.

Compulsory Attendance

Whenever considered feasible, and particularly in seven states where compulsory school attendance laws operate through the seventeenth and eighteenth years, attendance at vocational or continuation daytime schools can be encouraged. The principal needs to re-examine his previously accepted philosophy regarding the desirability of compulsory attendance of all 17- and 18-year-old youths under present and imminent conditions facing youth and the nation.

Many of these suggestions may be unpalatable and disliked. But it is no longer a question of what we like. The question is what must be done. Wherever circumstances have forced their adoption, most educators would admit that half-day sessions, staggered shifts, shorter class periods, a six-day school week, or the 12-months school (except for enrichment and extension of the curriculum. such as recreation, camping trips, remedial guidance, etc.) are probably unsound as ultimate patterns. As temporary measures designed to alleviate an immediate, critical building shortage, they have merit for a limited time. Temporary, portable buildings, if built to acceptable standards, also provide another successful answer to overcrowded conditions. Most school authorities frown upon their continued use as a permanent means of solving the problem, although San Diego has adopted them as a permanent part of the planning to house an ever growing, ever shifting school population.

New Office Developments

The wise principal will also take a critical look at his office routine and procedures to clear the decks before the tide of mounting enrollments threatens to engulf him. Modern-ization and mechanization work marvels in time and effort saved. Copying machines, micro-filming of bulky records, electric type-writers, sorting and filing machines for the larger schools, public address, inter-com, and house telephone systems, dictating and recording machines, etc., are readily available and are already in use in many alert secondary school offices.

The secondary school principal in the days to come will need to know the arguments, now brewing into a controversy, about quality or quantity in our high schools. The National Association of Secondary-School Principals has received a grant of \$120,000 from the Fund for the Advancement of Education for a study in ten selected high schools to seek improvement in the quality of instruction. One of these, Evanston Township, Illinois, is experimenting with closed circuit television instruction; another, Newton, Mass., is conducting certain improved curriculum studies.

Finally, the secondary school principal in the perplexing days ahead will have a plan to accomplish in 1959; that, in 1960, 1965, 1970. He will make such a plan a faculty 1965. He will make such a plan a faculty project with the constant assistance and support of his superintendent and board of education. From time to time, he will take the initiative to revise his plan in the light of past accomplishments, postponements, and setbacks. Then, and only then, will he have faced up to his problem; then he will have developed capacity to project the future.

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AMERICAN SCHOOL BOARD JOURNAL

An Independent Periodical of School Administration
William C. Bruce, Editor

DESIRABLE REDIRECTION

THE school as an essential institution has only one major duty to perform—the education of young Americans as human beings, as citizens, as workers, as members of a rapidly changing society. Like other institutions, the school must constantly battle to maintain the levels of its program and to improve its instructional and over-all educational service. Common sources of interference are usually instructional subjects or forms of activity which may be valuable in themselves but which dilute or lessen the time given to the essential studies and activities. Some of these enterprises urged by special groups have a further effect of subtly changing the serious tone, especially of the secondary school, into playful and pointless attitudes so harmful to sound achievement in college and in adult life.

There are good reasons for the school boards to utilize current criticisms of the schools in their constructive aspects by initiating plans (a) for increasing the length of the school year from 180 days to 200 days per year; (b) for strengthening the programs in mathematics and science, in keeping with the purposes of the National Defense Program; (c) for insisting on greater emphasis on the important subjects in the social sciences and for reducing the fringe subjects and easy courses; (d) for doing better guidance and placement work that will challenge every boy and girl to work to the best of his or her ability and set higher goals of life; (e) for encouraging movements to prevent outside activities from interrupting the daily schedules of class, laboratory, and shop work; and (f) by shifting athletics, club activities, etc., to periods before or after regular school hours.

We do not want the heavy over-seriousness of European schools to be transplanted to the United States, but we do need a consideration of the old American ideal of achievement, of ambition, and of willingness to compete and to work.

TRANSITION PERIODS IN SCHOOL BOARDS

AS A rule, boards of educations are continuous bodies in membership, recruited from year to year with one or two new members who orient themselves during the first year by learning from the old members and leaning on the latter's experience. In such situations the school administration continues to function in an orderly and acceptable manner.

It happens occasionally that only a minority of members are continued in office or that a local upheaval causes the replacement of the entire membership. The inexperienced body must then depend almost without recourse upon the recommendations of the superintendent and his staff, and on their intelligence and on the wisdom which the members have garnered in business or professional work. In such a situation hard-working subcommittees who utilize the superintendent's guidance to search deeply into the nature of the problems presented and who invite the opinions of citizens school groups may perform good services. The individual who needs the most help in carrying on the business of an entirely

new board is the presiding officer who requires not only the superintendent's directions but also the frequent opinions of the school district's attorney.

Two cautions deserve to be repeated for the benefit of new board members in any situation: (1) The success of every school board depends upon team work. The individual board member has few official powers which he can exert alone. He can act legally and effectively only through his vote in the meetings of the board. He must early learn the difference between policy making and administration. (2) The superintendent is the chief executive of the schools and it is his job to run them. He is also the educational expert and as such must recommend the policies which the board adopts. It is the board's duty to judge the wisdom and the validity of the superintendent's recommendations. This is a crucial responsibility which the board must accept always in the light of good public policy and for the children's welfare.

EXECUTIVE QUALITIES

SCHOOL boards confronted with the task of employing a superintendent are frequently confused by the twofold need of finding a man who is, on the one hand, an educator — a man with skill as a teacher and supervisor and possessed of a sound working knowledge of educational philosophy — and, on the other hand, a strong executive — a man of sound judgment, ready to head up the largest undertaking in the community. In this connection Robert McMurry, in the Harvard Business Review, points out three marks of a business executive which a superintendent of schools needs in superlatively effective amount:

"a) Ability to accept heavy responsibility without undue anxiety.

"b) Capacity to make sound judgments under pressure without panic or undue aggressiveness.

"c) An active, creative, dynamic orientation toward his environment (that is, must not merely have passively adapted to it but have shaped and molded it to meet his needs).

"Many other qualities — for example, ability to get along with others — are useful, but it is the above three that are the indispensable requisites of executive success."

THE BETTER MOTIVE

THERE is much truth in the statement that a monetary reward is the least worthy of all human motives. There are other satisfactions which encourage men to accept a public office and to work for their communities in a self sacrificing spirit. In this connection Jess Christianson expressed an opinion in the Colorado School Board Bulletin worth remembering:

Although people work for pay, money alone seldom motivates a person to give his or her best to an activity. An individual will put forth even greater effort and carry an even heavier load of responsibility if he is discharging a trust placed in him by his friends. . . .

The energy and effort given by board members to maintain and advance public education are unrewarding financially. In fact, the time donated may even result in a monetary loss. Sometimes the public does not adequately express appreciation for the hours of service and the heavy responsibilities accepted by school board members. It is not uncommon for the voters to allow some incident of the moment to determine their vote on important matters. Sometimes the public may suspect self-interest . . . of a board member when actually none exists.

suspect self-interest . . . of a board member when actually none exists.

In spite of the failure of the public to express frequently its appreciation for long and faithful service, membership on a school board is an honor which will arouse pride in any man or woman. It may be interpreted as meaning that in the community where he is known best, the people have enough confidence in his ability, good judgment and integrity to entrust to him the responsibility for decisions on matters affecting the future of their children.

Membership on a school board, with a reasonable amount of public support, can be one of the most satisfying public services which a person can render.

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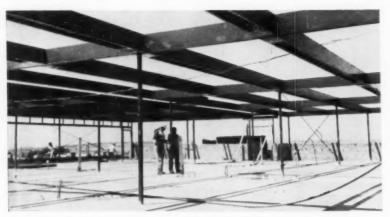
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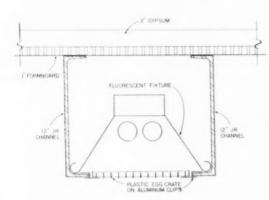
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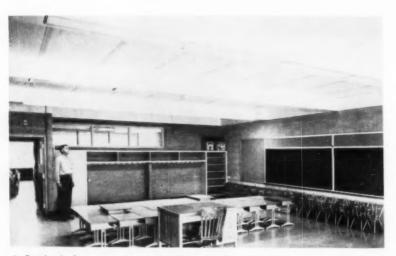
In construction, the main roof structural supports are set eight feet on center throughout the building. The channels also house the lighting fixtures.

\$375 a Classroom Saved!

Roof Supports Designed to House Lighting Fixtures



A sketch of the way in which "boxed" structural steel members were used to house fluorescent lighting fixtures in four Adams County, Colo., schools. The channels were also used to support the roof.



A finished classroom in one of the schools where this novel method of housing lighting fixtures was incorporated. The fixtures are recessed in the "channels" which are painted to blend with the ceiling board.

A clever method of using lightweight structural steel beams to house the lighting fixtures in four Denver area schools has resulted in substantial savings in construction costs. Roland M. Johnson, Denver architect, has estimated that \$25 has been saved per lighting fixture, or about \$375 per room in the four Adams County. Colo., schools he has designed.

The fluorescent light fixtures are set inside "boxed" channels (as indicated by the sketch below). A plastic egg-crate grid is held in place beneath the fixtures by aluminum clips. Five fixtures, each 4 ft. long, are in each channel, making a total of 15 for each classroom. The channels are exposed and painted harmoniously to blend with the ceiling and trim. All connections are hidden which gives the classroom an over-all "clean" appearance.

The boxed, 12-in. channels, used to support the roof as well as to frame the light fixtures, are on 8-ft. centers and run uninterruptedly through the two wings which house the classrooms in these schools. The roofs are poured concrete, and the ceilings are 1-in. formed board. Bulb tees are used as intermediate supports for the roof. The roof design load is 60 pounds per square foot.

In addition to the cost savings, this method of recessing the light fixtures in the boxed channel also has proved very attractive and, as pointed out by school officials, requires minimum maintenance.

(For further information on the use of "junior channels" in schools, circle number SPI-3 on the Reader's Service Section, page 75).

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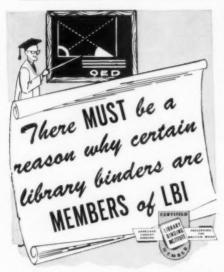
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SCHOOL ATTORNEYS

(Concluded from page 27)

2. Attorneys should be selected on the basis of specialization. Assuming honesty, there is no quality so important to the school district as competence. Frequently local attorneys who are not school law specialists know less about school law than good superintendents — and that's just not enough!

3. Special bonding attorneys should be employed for bond issue elections and



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subsequent affairs leading to the acquisition of the bond money. Local legal counsel rarely are qualified to do more than render assistance to specialists in municipal bond law in school bond elections. It is vital that mistakes that might invalidate an election do not occur in bond proceedings.

4. Fees should be based on the time required for services performed by the attorneys involved. The only equitable solution to the matter of fees seems to be payment for time actually spent in the service of the district at a predetermined rate. Besides being fair to both the attorney and the school board, this has the advantage of making it perfectly clear to the school district patrons what services are being rendered and how much they cost.

5. Attorneys should receive direction and report to the superintendent of schools. The superintendent, as executive officer of the board, should act as intermediary for all items coming before the board of education. In certain complicated legal situations the superintend-

ent may wish to have the attorney report directly to the board. These instances should be the exception to the general rule.

6. Local legal counsel should attend school board meetings only when specific matters in his jurisdiction are anticipated. The survey clearly indicated that in those situations where the local counsel began to participate in educational policy decisions, he was a regular attendant at school board meetings.

7. Attorneys should be treated administratively simply as consultants to the superintendent and board of education on technical legal affairs. It is important that it be made clear to all that the attorney serves in a technical staff capacity to the superintendent. The distinction between line and staff is important to remember.

8. Clear board policies and administrative regulations governing the financial and working relationship of attorneys to the school board and superintendent should be written and made a matter of record.

REMOVE SHACKLES AND WATCH GROWTH!

In Dedham, Mass., a conservative New England town that claims to be the home of America's first public school, some startling traditions are being broken. Over 1000 youngsters in grades four, five, and six returned to school in September to find the shackles, that for centuries have bound the class together from the standpoint of rate of progress and in level of work attempted, have been kicked asunder.

Through a grant from the U. S. Office of Education and under the direction of Dr. Donald D. Durrell, nationally-known figure in the field of reading, a research project is being carried on, the results of which may well establish a new pattern for education in the future. A fourth-grade arithmetic text no longer serves for a year's consumption. The class instead is divided into teams of two or three, and each team progresses at a rate comparable to their ability. At this writing, just past the midyear, one third of the people in grades 4, 5, and 6 have finished the text of their grade and many have gone into the text of one or two grades above.

Are they mastering the concepts? Will they retain what they are learning? These questions from anxious parents have prompted the superintendent to spend time in the classrooms constantly checking and, think what you may, these youngsters know what they are doing, enjoy school much more, and are having an opportunity to find a level suitable to them as *individuals*—not one which fits only the lower middle of the class.

Spelling proved to be exciting to Dedham youngsters this year! When you can proceed with a partner as fast as you can pass the tests and show proper use of the words, spelling is no longer a waiting and

time-wasting period for those who already know the words. As one youngster said: "Previously, I used to hear so many people spell the words wrong that I used to worry for fear that I would get confused before it came my turn."

Team learning is practiced as a part of all subjects. However, it in no way rules out "mass instruction" when needed. The teams vary in accordance with the purpose. Whereas, two people of like ability might serve as a team in arithmetic or spelling, five people of differing ability might serve the need in some aspects of the language or social studies program.

Teacher-made controls in each subject is necessary to insure high standards of achievement. Ground rules for team activities are always the prerequisite for such procedure. The program in Dedham is planned to use both Team Learning and Mass Instruction techniques, whichever accommodates the purpose of the learning activity best.

This space does not permit a complete description of the research contract but the "growth" results in social learnings, improvement in parent attitude toward school and gains in academic standing will be made known at the end of this school year. Visitors to the schools claim it to be a true approach to individual abilities. Teachers feel confident of much additional growth on the part of the class. Parents are for the most part happy that at last something is being done to assist all pupils in the class, and the kids say that school is an exciting place.

Harvey B. Scribner
 Superintendent, Dedham, Mass.,
 Schools



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NEW BOOKS

Mathematics and Science Teaching and Facilities

Compiled by Sam M. Lambert. Paper, 49 pp., 50 cents. Research Division, National Education Association, Washington 6, D. C.

This extensive study of mathematics and science teaching seeks to present a general picture, to help administrators plan future trends in education, and to indicate areas for further research. Over 50 per cent of the reporting schools had recently completed a curriculum revision project in both science and mathematics, or in one or more of these two fields. Fewer schools had added subject than had worked on previous studies. Large schools are working to extend the array of offerings and are making provision for different student interests. Over 87 per cent of the schools have been expanding their guidance and counseling facilities in order to identify and encourage students with special aptitudes. Some few secondary schools are not equipped for mathematics instruction. No group of schools were completely furnished with teaching aids and materials.

The picture of science teaching facilities is one of deficiencies. Medium-size schools are better equipped than small schools, and large schools better than medium-size schools. Science fixtures and installations are inadequate. Large schools are generally better equipped. About nine in ten schools reported that one or more of a series of limitations were handicapping their programs of mathematics and science. Shortage of models and apparatus were prevalent. There is, finally, a shortage of good teachers and a lack of interest among the students who do enroll.

School Plant Management Bibliography

By N. E. Viles. Paper, 38 pp. U. S. Department of Health, Education, and Welfare. Available from Superintendent of Documents, Government Printing Office, Washington 25, D. C.

This valuable bibliography, covering the years 1950 through 1958, represents a complete selection of available material, including (1) custodial selection, work loads and relations; (2) custodial training; (3) custodial operations and practices; (4) fire protection and insurance; (5) floors and floor care; (6) heating, ventilating, plumbing, and lighting; (7) maintenance and repairs; (7) modernization and rehabilitation; (8) school grounds, care and landscaping; (9) plant management problems; (10) supplies and equipment.

Administration of Noninstructional Personnel Services

By William A. Yeager. Cloth, 413 pp., \$5.50. Harper & Brothers, New York 16, N. Y.

This book planned for use in professional courses in school administration, describes at length (1) the nature and classification of the noninstructional employees of city school systems and the controls which boards of education have over them; (2) outlines the common essential basis of administering noninstructional personnel from the legal, employment, supervisory, and compensation standpoints, (3) the area of business management and secretational service, (4) the area of school plant and facilities with emphasis on planning, construction, operation, and maintenance, (5) the area of special services, particularly enrollment and attendance services, health and medical inspection, food and lunch services, and pupil transportation. A final chapter dis-

cusses the need and nature of educational leadership.

The approach throughout the book is highly professional, leisurely, and technical. The lan-guage is formal and technically accurate. In the chapters which take up specific services, there is necessarily some repetition of principles and techniques which have been pre-sented in the earlier discussion of common essentials. The author, who recently passed on, has been a wide observer of the administrative work done in administering the noninstruc-tional areas of city schools; he displays an intimate knowledge of the literature of the field. Readers who are actively engaged in the work of managing the business affairs of schools, purchasing, directing maintenance work, accounting, etc., will have to read and reread some of the sections of the book to fully appreciate some of the points which the author makes. Readers of such current writers as Linn, Viles, Morphet, Garber, Reeder, and others, will miss the hardhitting, factual approach which is increasingly characterizing the literature of this field. The book is a useful contribution and helps round out administra-tive areas that are important and hitherto lacking in attention.

Handbook of Tests for Purchasing

Based on a study by George B. Larke. Paper, 54 pp., \$2. California Association of Public School Business Officials, 111 N. Grevillea Ave., Inglewood, Calif.

Of the necessary steps in an efficient school purchasing plan, the sampling and testing of articles delivered has been the weakest and most in need of definitely better result-giving procedures. The present handbook consists of more than one hundred physical and chemical tests which have been found effective in school systems and which can be used in mediumsize and smaller cities. The articles to be tested include (1) art supplies, (2) furniture, (3) general supplies, (4) building maintenance and operation materials, (5) office supplies, (6) papers, (7) textiles. The tests which are outlined in the barest form have been developed largely from federal specifications and intended in the results to prove the quality and other characteristics sought in the original specifications and considered most desirable for school purposes. The outlines include a list of needed test equipment and supplies, the several procedures, and the definite results—good or bad—to be looked for. The inexperienced tester may find complete information on each of the tests in the federal specifications or commercial standards from which the origi-nal data were obtained. The full value of all tests presented can be achieved in a central school testing laboratory, or in a well-equipped high school laboratory

Proceedings ASBO, 1958

Edited by Charles W. Foster. Cloth, 499 pp., \$5. Association of School Business Officials, Evanston, Ill.

Both the theory and the practice of school business administration have undergone a transformation during the past fifty years, and this report of ASBO's forty-fourth convention gives evidence of the career growth of its members and of the service they render. It would be an interesting research job to pick out and restate in orderly form, the numerous basic principles of good school business administration stated or implied in the papers and discussions of the meeting. The papers by John W. Lewis on "Principles of Purchasing," and by Temple Marshall on "Accounting Handbook" are illustrations of fine basic statements that reflect a deeper understanding of underlying theory and its application to current practices. The report is fully illustrated with action pictures taken at the convention.

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THE SCHOOL SCENE

(Concluded from page 8)

takes in the neighboring communities known as the Five Towns.

The South Shore Jewish community council had opposed reciting of the Lord's Prayer in school, contending it violated the principle of separation of church and state and "the religious sensibilities of a large portion of the community."

The religious council of the Five Towns, which includes members of the Protestant, Catholic and Jewish faiths, said it was opposed to sectarian prayers in the public schools and that it favored a stanza from "America." The school board acted accordingly.

FEDERAL AID DEBATE

The House Education and Labor Committee recently shelved a vote on H.R. 22, main opponent of the Administration's H.R. 4268, in another round in the federal-support legislation fight.

This amended Metcalf bill, which has the support of the National Education Association, now limits its program to four years rather than operating on a permanent basis and limits its allocation to the states per school-age child to \$25 for four years instead of rising to \$100 per child in the fourth year.

In supporting the Administration's bill—intended to simulate school construction by aiding needy districts in paying part of their "debt service" for new construction in the amount of \$600 million each year for five years, HEW Secretary Flemming stated "Grants (as contained in H.R. 22) will tend to establish standards which could become 'controls' . . . and thus the federal government would be interfering with the local control of public school systems."

HANDBOOK FOR SCIENCE TEACHERS

The study of science in the New York City elementary schools has been given a boost by the board of education through the publication of a series of teachers' handbooks. Distribution of "Earth in Space," the second of a projected 7-handbook series, has recently been completed.

The new handbooks are expected to aid teachers in showing pupils from kindergarten through the sixth year how to explore problems in science in the classroom. The handbooks contain source material from which science experiences, activities, and units can be developed at the various school levels. Although each handbook deals with only one of the seven areas of science, the content material is interrelated for use as required. In-service courses and other guides are planned to enable teachers to gain experience in the use of science materials, workshops, and grade conferences.

DUKE LAW CONFERENCE

The annual Duke school law conference will be held June 23-24. Based on the theme, "Legal Aspects of Teacher Administration," panel sessions will consider such topics as "Contractural and Employment Rights and Liabilities of Teachers," "Legal Scope of Teachers' Freedoms," etc. Additional information can be obtained from Dr. E. C. Bolmeier, Duke University, Durham, N. C.

FILMSTRIP AVAILABLE

The 1959 AASA School Building filmstrip, based on the architectural exhibit of the association's convention, is now available. The 141, black and white, 35-mm. frames, which illustrate new schools and special buildings in every section of the country, can be purchased for \$6 from the American Association of School Administrators, 1201 Sixteenth St., N.W., Washington 6, D. C.



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For advanced students, too. Teachers especially like Royal for advanced students, because of its unique Touch Control*. This eases the transition

from manual to electric typing—makes it a natural one. And, of course, all controls are in the same familiar positions, including tabular and backspacing keys.

Royal sturdiness is well known. Teachers know that there's almost no "time-out-for-illness." But, if repairs are necessary, they're done with minimum interruption to teaching time—Royal has more service points than any other typewriter manufacturer.

Would you like a demonstration today? See for yourself how much ease Royal Electric can add to both teaching and learning. Call your Royal Representative. He'll be happy to arrange a free classroom demonstration and trial, at your convenience.



This is Twin-Pakⁿ, Royal's exclusive quick-changing ribbon that fingers never



Product of Royal McBee Corporation, World's Largest Manufacturer of Typewriters

THERE ARE MORE ROYAL TYPEWRITERS IN SCHOOL AND OFFICE USE THAN ANY OTHER MAKE.

PERSONAL NEWS

CALIFORNIA

E. Monfred Evons, a leader in adult education in the public schools of Los Angeles, retired on April 30, after a 37-year career in education. Mr. Evans served as a teacher for several years, then was made a principal in the Metropolitan Evening High School, and later became an assistant supervisor. In 1936 he assumed the position of supervisor in charge of adult education, and in 1953 was promoted to assistant superintendent.

Campbell Minor, of Greenfield, has accepted

the superintendency at Turlock.

Kenneth L. Peters has been elected super-intendent of the unified school district of Beverly Hills. He was formerly associate superintendent and principal of the high school

GEORGIA

Miss Ira Jarrell has resigned as superintendent at Atlanta.

Walton M. Gordon is the new superintendent in Honolulu. Charles W. Isle is first assistant superintendent.

Clyde C. Corn has been re-elected as superintendent at Roanoke.



Dr. Clyde Parker has been appointed Superintendent of the Niles Township Community School, Skokie, High Ill. Before serving this year as Assistant Superintendent of the Oak Park Elementary Schools, Dr. Parker was Superintendent of the Cedar Rapids, Ia.,

Public Schools for 12 years.

IOWA

Mrs. Stephen G. Darling is the new president of the Iowa City board.

Don Begg has been re-elected superintendent at Oakland

Ross A. Engel has been elected administrative assistant for the Iowa City schools

Supt. Arnold Solisbury has been re-elected at Cedar Rapids.

Arnold C. Christensen has been elected president of the Council Bluffs board.

Leslie G. Howkins has been elected presi-

dent at Mason City James J. Ahern has been elected president

of the Urbandale board.

L. L. Doubert is the new president of the

Des Moines board. Mrs. Rolland E. Grefe is vice-president.

Anthony Marinaccio is the new superintendent at Davenport. He was formerly located at Kankakee, Ill.

KANSAS

Wendell Hubbard has been elected superintendent in suburban Kansas City

MICHIGAN

Lynn M. Bortlett has been re-elected state superintendent of public instruction for Michigan

Karl Randels has been elected assistant superintendent at Lakeview.

Roy L. Stevens, Jr., has been elected a member of the Detroit board.

MINNESOTA

William H. Cole is the new president and Karl Twedt the new vice-president of the

board of Special School District No. 6, South St. Paul.

MISSOURI

Rev. John L. Hicks has been elected a member of the board at St. Louis.

Supt. R. B. Doolin, of North Kansas City, has been re-elected with an increase in salary.

Darrie L. Hemmy succeeds Jack Baier as superintendent at Noxon.

NEW JERSEY

George W. Hohl, of Des Moines, has accepted the superintendency at Passaic. He succeeds Clark W. McDermith.

Supt. H. F. Allred of Roswell, has been re-

elected for a three-year term.

Joe T. Gonzales has been elected superintendent at Santa Rosa to succeed Paul Scarbrough.

PENNSYLVANIA

Stephen Christian, president of the Braddock board, died on March 16. He was serving his third term as a member,

Houston E. Stevens is the new superintendent at Wellman, Tex

WISCONSIN

Charles J. Lacke is the new superintendent at St. Francis.

Eugene Tornow of Appleton has been elected superintendent at Watertown.



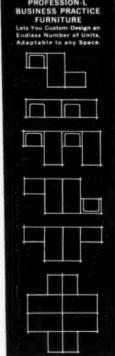
The NEW WAY to TEACH Classes in 1 Room!



TYPING . SHORTHAND . BOOKKEEPING MACHINE PRACTICE . GENERAL BUSINESS

New functionally styled Cramer Profession-L school desks are the answer to the commercial teacher's prayer. You can teach all business courses in the same classroom. Typewriter units are specially constructed to completely eliminate machine movement and vibration. Profession-L Desks let you seat more students comfortably, efficiently . . with greater work area, at lower cost.

Use them with Cramer Student Posture Chairs that encourage correct posture habits, lessen fatigue. 3-way adjustment for seat height, back height, seat depth. Formed, natural plywood seat.









CRAMER POSTURE CHAIR CO., INC., 625 ADAMS, DEPT. AS-6, KANSAS CITY, KANSAS

NEWS of **PRODUCTS** for the Schools

HANDSOME CURTAIN WALLS

Thinlite Curtain Walls from Kimble Glass Co., subsidiary of Owens-Illinois, Toledo 1, Ohio, now include new horizontal, rectangular,



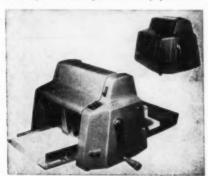
Interesting Wall Patterns

and square shapes plus 11 colors. Basic glass panels are in 3 tints: white, yellow and green. The permanent ceramic fired-on exterior panels are available in red, golden yellow, indigo, bronze, turquoise, peacock, charcoal, and ebony. Colors and shapes can be intermixed to form interesting mosaic wall patterns. The modular panes, measuring 4 by 2 ft. and 5 by 2 ft. are two inches thick with extruded aluminum interlocking perimeters, fully insulated with Neoprene gaskets. The entire installation, weighing 12 lb. per sq. ft., can be fastened with a screwdriver. Send for A.I.A. file from the manufacturer.

(For Further Details Circle Index Code 089)

PASTE-INK MIMEOGRAPH

Printing press quality is possible with a BDC Rex Rotary mimeograph that utilizes twin cylinders and printer's heavy paste ink.



Offers Printing Press Quality

Model M-4H (pictured) is a lower-priced, hand-operated version of the M-4 electric mimeograph, both made by Bohn Duplicator Corp., New York City. In place of the usual perforated drum with liquid ink, the M-4H uses two cylinders and an oscillating ink roller. The paste ink does not leak, drip, cake, or require time-consuming make-ready or clean-up. It produces a sharp, clean copy. Other advantages of the machine are: 3-minute color change, accurate register, automatic cut-off counter, three-way copy adjustment, automatic feed for stock from tissue to cardboard weight, postcard to legal size. When not in use, the machine folds into its own dustproof

case, the size of a standard typewriter. Send for a portfolio of mimeographed samples.

(For Further Details Circle Index Code 090)

FOR ENCLOSED STAIRWELLS

A partitioning system to eliminate fire hazards due to open stairwells has been devised by Unistrut Products Co., Chicago. ColorLine partitioning systems, constructed with adjustable metal frames, allow custom-fit and blend with any architectural style. They eliminate major remodeling costs as they are easily installed. Partitions are paneled with wired glass or other fire retardant materials and include single or double action doors. Write to the manufacturer for full information.

(For Further Details Circle Index Code 091)

FOLDING ROOM DIVIDERS

Folding wall partitions from Bemis Bro. Bag Co., Minneapolis 15, are designed to be used in any kind of an institution needing dividers for large areas. The walls feature a new compactness, nylon rollers for easy operation, lightness in weight, ease of mainte-



Used as Stage Curtain

nance, and fire and draft resistance. The economical walls can be ordered in heights up to 14 ft. and in any width. BemisWall is constructed of a fabric sheet impregnated and coated with fire-resistant vinyl plastic and is available in a wide variety of colors. Bemis-Wall fabric forms the hinges with no internal rods or internal mechanism which could break or present operational problems. It can be mounted to the ceiling or on tracks recessed in the ceiling, walls, doorways, or any other desired mounting. Some of the uses for Bemis-Wall are: stage curtains, photographer's backdrop, and separation of work areas in shops and classrooms. Write for illustrated brochure.

(For Further Details Circle Index Code 092)

AUDIO-VISUAL STORAGE CABINET

A combination projector stand and slidefilm storage cabinet is a practical portable unit made by Jack C. Coffey Co., North Chicago, III. The heavy-gauge steel cabinet at the bottom holds a record rack for group filing of up to 100 records, up to 12 in. size, individually or in albums. There is a drawer which holds 45 films in key-numbered compartments. The cabinet can be locked. The projector stand above the cabinet features an adjustable center shelf. Height is 37 in. on 2 in casters, but 3 or 4 in. casters are also available. The top has a guard rail covered by scuff-proof, sound-absorbing masonite. The stand and storage cabinet are also available in separate units, in



Record and Film Storage

a silver gray hammerloid finish with regency red shelves.

(For Further Details Circle Index Code 093)

FIRE-STOPPING PAINT

A revolutionary new flame-retardant paint, rated two to four times more effective than similar coatings, is now on the market. It is called "Saf," a trademark for "Stops all fires." Manufactured by Baltimore Paint and Chemical Corp., and marketed nationally by Alim Corp., of New York City, this paint has undergone vigorous testing by Underwriters Laboratory. It has a flame-spread rating of 10 for two coats, and 15 for one coat. (The lowest possible number is most desirable since the burning building materials often have a UL classification far in excess of 100.) Saf is smokeless, non-flammable, and non-toxic. As soon as a flame touches any surface so painted, the paint swells into a thin film; as the fire gets hotter, the film puffs into a sponge-like insulating layer, resembling foam rubber. This mat not only stops the progress of flames, preventing the burning of surface, it also insulates the surface against the disasterous spread of heat. The new paint will withstand 1700 degrees up to one hour, allowing plenty of time to escape and summon fire-fighting equipment. Its insulating effect prevents heat from



Two wooden army barracks were fired simultaneously for 30 minutes. The Saf-painted building (left) had only minor damages, while the untreated building (right) was consumed.

reaching steel beams and supports. Sāf can be applied by brush, roller, or spray. Available in flat interior or interior gloss in modern decorator colors, it dries to touch in four to six hours.

(For Further Details Circle Index Code 094)

(Continued on page 66)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION



Look...no wall thermostat!

New Controls with Unit-Mounted Thermostats Are . . .



All controls are inside

MORE ACCURATE PROTECTED FROM DUST
TAMPERPROOF FASTER RESPONDING

Barber-Colman now offers the most advanced "packaged" control systems" for every unit ventilator installation — steam, hot water, hot and chilled water, gas and electric.

All elements of a Barber-Colman unit ventilator control system, including the thermostat, are mounted within the unit ventilator enclosure. This eliminates the need for a wall-mounted thermostat, substantially reducing installation costs and providing greater control accuracy. It also means that factory installation of controls is practical.

Having the thermostat mechanism enclosed in the unit eliminates chalk dust and dirt problems. Temperature tampering is also eliminated. Even more important, unit mounting permits superior control through the use of the "dual element" aspirated thermostat principle. This is the approved temperature control principle employed in the most exacting laboratory installations.

Ask for booklets entitled "Better Control Electrically" and "Unit Ventilator Application File." These two new booklets explain why Barber-Colman electric control is superior and give specifications and details on control systems for all leading makes and models of unit ventilators. Call your Barber-Colman representative or write today.

BARBER-COLMAN COMPANY

Dept. R, 1334 Rock Street, Rockford, Illinois

News of Products . . .

(Continued from page 64)

QUIET FLOOR CARE

A new type of gear reducer makes for the silent operation of the new Model 16E Silent Huntington floor machine. The model has a



Available in Two Sizes

16-in, brush diameter, 50 ft. of cable, and polish and scrub brushes that are color-coded. Runaways are prevented by a micro-switch which instantly stops the machine when the handle is released. The low-chrome-plated machine is powered by a ½ h.p. motor. According to the maulacturer, Huntington Laboratories, Inc., Huntington, Ind., the machine is evenly balanced for easy operation. Several kinds of brushes, sanding disks, steelwool pads, etc., are offered at extra cost. A 20-inch model is also available

(For Further Details Circle Index Code 095)

NYLON TOILET TANK VALVE

The Hydro toilet tank valve, constructed chiefly of nylon with a solid polyethelene floatball, has only two moving parts. It is adaptable to any tank using standard fittings. The unit cuts mechanical difficulties to a minimum, according to the manufacturer, with a positive shut off that makes for quiet, fast tank filling which eliminates water waste. Because of its nylon and plastic construction, the unit resists corrosion; minerals and foreign particles in water, extreme heat and cold cannot harm it. Retailing for about \$6, the Hydro unit is complete in one package for easy installation. Its sealed valve unit is guaranteed unconditionally for one year. The valve unit, which retails for about \$1, can be replaced easily without tools. Unit is available from wholesale plumbing houses or direct from Hydro Valve Corp., Austin, Tex

(For Further Details Circle Index Code 096)

DESK SETS FOR PUBLIC USE

Three types of commercial desk pen sets are available from Esterbrook Pen Co., Camden I, N. J. The desk sets, all priced under \$5\$, are offered in several colors and have parts available for flush or recessed mounting at public counters. The Deskmaster, a fountain pen set, can be ordered in a choice of 32 ponts, in six colors, and with or without a chain. The Feedmatic, a capillary set, has a six-months' supply of ink, is spill proof, and offers a choice of points. The ballpoint desk set, Recorder, will serve the average office for 6 months before refills are needed. All sets are unconditionally guaranteed by the manufacturer.

(For Further Details Circle Index Code 097)

COMBINATION TEETER-WHIRL

A Teeter-Whirl combines a merry-go-round with a teeter totter in an action-packed playground piece. Manufactured by Rolfe Prod-



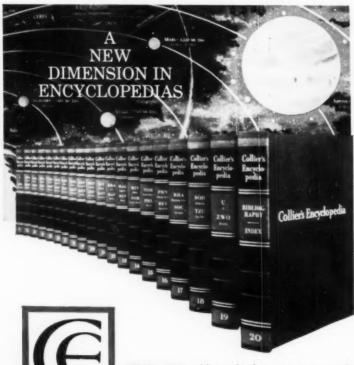
For Unsupervised Play

ucts Co., Mason City, Iowa, the unit is of lightweight tubular steel with wooden seats. It requires no installation and needs little maintenance. Seats are suspended on auto-type suspension bushings. According to the makers, the unit is so safe that children do not need supervision while using it.

(For Further Details Circle Index Code 098)

(Continued on page 68)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION



NEW 1959 COLLIER'S ENCYCLOPEDIA

The new 1959 Collier's Encyclopedia offers a New Dimension in planned, progressive expansion based on the reference needs and interests of modern readers.

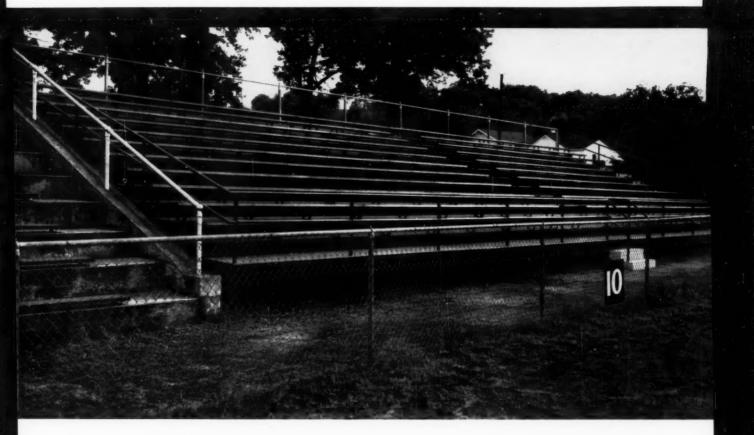
This new edition combines 427 completely new authoritative articles with over 900 new illustrations to provide the most timely information you can possibly get in an encyclopedia.

A total of 1,719 articles have been added or revised. Such timely subjects as Space Satellites, Space Travel, Guided Missiles and Rockets again have been completely up dated and expanded. With over 4,000 pages devoted to outstanding coverage of general science, chemistry, physics, biology, mathematics and allied subjects, Collier's Encyclopedia can augment every school program in accordance with the provisions of Title III of the National Defense Education Act of 1958.

No wonder Collier's Encyclopedia is recommended by every Educational and Library Agency that evaluates encyclopedias.

WRITE FOR additional information, price catalog and curriculum-aid booklets. Educational Division, Collier's Encyclopedia, 640 Fifth Ave., New York 19, N.Y.

See vou at NEA Conference, Kiel Auditorium, St. Louis, Booth 222-June 28-July 3.



1,000 grandstand seats in 26 days!

The watertight steel plates form a perfect roof for room facilities beneath grandstand for storage, lockers, showers, concession booths, etc.



This grandstand is one of two identical USS Am-Bridge Standard Steel Stadium Units built as additions to an existing grandstand at the Fairfield High School football field, Fairfield, Alabama. Each unit is 72' long, 11 rows deep, and holds 500 fans. Erection was completed in 26 days—two weeks ahead of schedule to be ready for the opening game.

You can easily and quickly expand any grandstand by adding AmBridge *Standard* Stadium units. And they form a perfect roof for lockers, showers and concession booths because the units are made from watertight steel plates. *And remember*, completely new AmBridge *Standard* Stadiums with up to 10,000 seating capacity can be built in 90 to 120 days.

Write for 24-page catalog. Free booklet tells you how to get a better stadium or grandstand for less money! It answers your questions as to the kind and size of structure, location, etc. Contains charts, diagrams and pictures of actual installations. Address your inquiry to Pittsburgh, or any district office listed below. USS is a registered trademark



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Philadelphia • Pittsburgh • Portland, Ore. • Roanoke • St. Louis • San Francisco
Trenton • United States Steel Export Company, New York

News of Products . . .

(Continued from page 66)

PORTABLE SCIENCE LAB

A fully assembled science table for grades 1 to 9 is available from School Equipment Mfg. Corp., Nashua, N. H. The Grade-Aid table is portable and requires no installation



Portable or Stationary

or service connections. Special features of the science table are: a 1½ in. counter treated to withstand heat and chemicals, complete heavy gauge steel structure, a lifetime baked-enamel finish, and heavy-duty hardware. Accessories and equipment include: hand-operated galley-type pump; stainless steel bowl, measuring 9 by 11 by 5 in., with tray plug and tail pipe: 4-in. casters with two locks; and two one-gallon plastic carboys for water supply and

waste. It has a duplex electric outlet, 110 a.c., with 20 ft. extension cord and automatic reel; portable propane burner complete with cartridge; frame rest; and hold-down bracket. Over-all dimensions are 48 in. long by 30 in. wide by 36 in. high, an extension leaf expands the length to 66 in. A stationary model, No. 6050, has comparable features.

(For Further Details Circle Index Code 099)

SECTIONAL LAB FURNITURE

Sectional laboratory furniture is available for immediate delivery from Laboratory Furniture Co., Inc., Mineola, L.I., N. Y. Constructed of all steel, these Steelab sectionals feature modern lines, ease of maintenance and durability. The new units have many interchangeable features, such as doors that can be replaced with drawers, drawer spaces can be changed into cupboards, and deep drawers can be replaced with shallow drawers. Request catalog No. W-4 and planning kits.

(For Further Details Circle Index Code 0100)

PRACTICAL TABLE MODELS

A versatile multi-purpose table which may be ordered in a choice of three tops or two types of bases is available from Sico Mfg. Co., Inc., Minneapolis 24, Minn. The table may be used in cafeteria, library, or classroom, wherever adaptable equipment is needed. A unique folding device, which lacks latches, locks, and levers, permits the tops to be easily tipped to a vertical position for storage. When folded, each additional table nests in 3 inches of space. The three tops in the Model 3000 series include: a 36 in. square; a 40 in. diameter round; and a rectangular top 30 in. wide and 48, 60, or 84 inches long, table height is 30 in. Fully portable, the tables have 3 in.



Top Tilts for Storage

rubber casters, two with locks, and a self-leveling device on the pedestal base. The top is board with laminated melamine plastic. The Plextone coated edge lacks banding to prevent collection of dirt and spillage. Steel framework is zinc coated to prevent rust and chipping. Platinum walnut color is standard, but other colors are available at extra charge.

(For Further Details Circle Index Code 0101)

TIP-PROOF TV STAND

A mobile TV stand for school television receivers is manufactured by Transvision, Inc., New Rochelle, N. Y. The stand functions as a directional antenna, eliminating "rabbitears." It has a front mounted knob for adjustment. An incorporated tilting device and a 48-in. stand enables viewers to easily see programs from all parts of the room. The TennaTable set moves easily on 5-in. casters, which can be locked into position. An extended base design prevents the stand from tipping; a safety ledge keeps the set from slipping. Extra accessories include: a hi-fidelity 8-in. speaker to mount under top shelf, safety belt to prevent set from being pushed off the stand, and a heavy-duty 12-ft. cord.

(For Further Details Circle Index Code 0102)

CONVERTIBLE SCIENCE LABS

A space saver for science laboratories is the Rotolab, a divided turntable which is set into the wall. The built-in, automatically rotated turntable operates as a rotating stage. It only takes 15 seconds to convert from one laboratory to another. Two science setups could







Revolving Science Facilities

be used for biology or physics; or a geology laboratory. A master control panel rotates each unit to the desired compartment individually, or all units at the same time. Two kinds of equipment are offered, one primarily for larger colleges and universities; the other for use in smaller colleges and high schools. Rotolab, manufactured by the Hamilton Mfg. Co., Two Rivers, Wis., was demonstrated recently at the Chicago Undergraduate Division of the University of Illinois.

(For Further Details Circle Index Code 0103)

(Concluded on page 70)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION



SCHOOL LUNCH

(Concluded from page 45)

and by rating each other's instructional techniques. Later in the program they had ample opportunity to apply their newly acquired skills to the necessary instruction of other staff members in the multifarious operations of a school kitchen.

Four significant gains resulted from these

practice sessions:

1. The steps in each operation were clarified for the instructors.

2. Each operation was standardized, since proposed job instruction plans were edited by the supervisor and instruction was carried on before the entire staff.

3. All who took part acquired a new confidence: the instructors in their ability to train, and the rest of the staff in their ability to perform.

The employees' manual was enriched by the addition of practical instruction sheets developed by the employees themselves.

The field of concentration for 1958-59 is the proper methods of receiving and storing merchandise, but included in the pre-school week's training was a review of previous year's instruction theme. This review involved each of the 40 members of the staff either as an instructor, a learner, or a judge of technique. In two three-hour sessions, each had actively participated in the set up, use and cleaning of every mechanical piece of kitchen equipment in

While physical skills and material subjects must occupy much of the available training time, the all-important factor of practical human relationship in a successful school kitchen is not neglected. Role-playing is a valuable medium of self expression and observation. Acting the part of an over-protective parent helps one to gain a new prospective and to face a future encounter, if not with sympathy and compassion, at least with composure. When cooks are allowed to elaborate, in public, on the wrong way to answer a critical question. they quickly recognize the right method of handling a potentially unpleasant situa-tion in the lunch line. Comparisons of lists inevitably prove that children's comments about food are few and often repeated. therefore, answers can be formulated in advance and adapted for friendly rebuttal.

In this field, as in most others, knowing what is to be done and how to do it permits a confident approach to the day's work. Consequently, formulas for handling complaints are often reviewed and prac-

Individual pride is now seldom injured by a casual remark, and often real improvements can be made when a new viewpoint is heard and considered.

Spirit of Unity Developed

One of the more gratifying effects of the training program is the spirit of unity that is developing throughout the district. In former years, methods and equipment were jealously guarded from kitchen to kitchen and identification was only by building name. Now however, identification is a proud "Ramapo 2" followed by the building name. When, on a limited budget, the latest small kitchen was opened, pieces of essential equipment were offered on the

basis that it is easier for a large kitchen to improvise. Emergency movement of individuals between schools is accomplished without emotional upheaval, while the increasingly free exchange of ideas plays an important role in keeping the program dynamic

Naturally there must be an over-all objective to motivate so large a team. The director feels that the long-range, continuous exposure of students to well-balanced meals will result in healthier food habits when these children become young adults and have relatively free choice. Attitudes and reactions are the only tangible evidence of how many employees have grasped this broader goal. It is apparent that active, guided discussion groups and carefully directed workshops are increasing individual awareness of the responsibility of each school to the total lunch program. Elementary school workers show more understanding with the slowness of child acceptance of basic foods, for results of their efforts may not be immediate. Those who formerly despaired at the lack of interest small children show in salads are beginning to realize that their patience in making these items tempting, contributes to the overwhelming popularity of the salad plate meal at the senior high school. By the same token, when a former student returns to school for a recipe, the ever present slogan "The health of this community is in your hands' acquires a new and deeper meaning. A fresh stimulus is added; great and urgent problems shrink to their proper proportions and working solutions are found.

LABORATORY FURNITURE available from factory stock

> building or modernizing your science rooms? here's your economical answer . . . immediate delivery on all products shown in Kem-Tech catalog.





WRITE FOR YOUR FREE COPY TODAY!

The complete Kem-Tech Science Furniture Line includes everything needed to completely equip science laboratories. Complete rooms of fine quality furniture, ideally suited for your particular requirements, can be ordered from our factory stock for immediate delivery.

Here's the economical way to equip new or remodeled science rooms with practical, soundly constructed furniture.

KEWAUNEE MFG. CO., Adrian, Michigan



ECHNICAL

Furniture Inc., 3001 West Front St., Statesville, H. Carelina

News of Products . . .

(Concluded from page 68)

SPACE-SAVING LAB TABLE

A four-student table from E. H. Sheldon Equipment Co., Muskegon, Mich., occupies less room space than most laboratory units,



For Four Students

yet offers ample work room for students. The work centers can also be used for demonstration purposes. Other classroom science apparatus from the firm includes wall-mounted, revolving cases designed on one side as a storage space for materials and with corkboard or chalkboard on the other side. Both horizontal and vertical panel cases, equipped with locks, are offered by the manufacturer. Send for literature on the entire line.

(For Further Details Circle Index Code 0104)

ART AND COMMERCIAL DESK

A newly designed "split top" desk from Smith System Mfg. Co., Minneapolis 14, Minn., can be used for art or commercial classes. At the touch of a button, the top



Duo-Purpose Top

automatically moves into any desired angle for writing, drawing, etc. The student can adjust half of the lid to suit his need while the other portion remains flat to keep materials in order. The desk is styled with tapered legs, rounded corners, and an understructure of 1½-in. round tapered steel tubing welded to a one-piece rigid frame. Fiberesin, used in the construction of the top, is a warp-proof laminated board with a tough melamine plastic surface that won't stain, chip, crack, or scratch. Other features of the desk are a stainless steel "catch-all" lip, two large book compartments, and rubber cushion floor guides. The desk

measures 30 by 22 by 35½ ins. and is available in gray or tan baked enamel finish.

(For Further Details Circle Index Code 0105)

SLIMLINE HAND DRYER

The newest model of the World Dryer Corp., Chicago, is a recessed electric hand dryer that extends only 3½ in. into a room. The dryer cabinet is offered in colors to match or harmonize with the decor. The dryer has a 30-second drying cycle and the same large air capacities as flush-mounted units. It operates on either 110 or 220 volt a.c. An automatic circuit breaker protects the heating element from overheating. The recessed unit fits 3½ in. into the wall and is recommended for new building construction, although it can be adapted to remodeling projects.

(For Further Details Circle Index Code 0106)

INDOOR EXERCISE UNIT

Physical education equipment designed primarily for small children is available from Fred Medart Products, Inc., St. Louis 18, Mo. The wall-attached Phys-Educator, constructed of steel tubing, is designed like an L-shaped ladder. The horizontal ladder can be used as



Folds Against Wall

a suspended climbing pole, climbing rope, trapeze, mechanic belt, and flying rings. Removable chinning bar is height adjustable and can be used when the unit is open or closed. When opened, the play device occupies 2 ft. 9 in. by 8 ft, of space. Closed, it extends only 8 inches from the wall, and the vertical ladder then serves as a stall bar. Available in bright colors and easily installed. It comes with a teacher's booklet suggesting practical exercises.

(For Further Details Circle Index Code 0107)

HARD PLASTIC GLOBE

The George F. Cram Co., Indianapolis 7, recently announced a new 12-in. world globe of hard plastic. This new plastic globe ball is now standard on all of the firm's 12-in, handmade deluxe globes. According to the manufacturer, this globe ball may be bounced and hammered without damage. It is unaffected by extreme changes in temperature. This lightweight globe ball weighs little more than a pound and is named Tuffy because of its ability to resist rough handling.

(For Further Details Circle Index Code 0108)

OCCASIONAL CHAIR

An attractive new Samsonite chair is offered by Shwayder Bros., Detroit 29, Mich. Designed to compliment the modern office, the chairs can be easily stacked for storage. The sturdy frame is square steel tubing finished in chip-resistant, baked enamel. Vinyl upholstery



Chairs Stack for Storage

is stain- and scratch-proof and easily cleaned with a damp cloth. Contour-curved backs and cushions add up to seating comfort. The occasional chairs are available in five colors, with or without arms, to match any decorating scheme. The chairs pictured have antique white upholstery with a bronze frame.

(For Further Details Circle Index Code 0109)

CATALOGS AND BOOKLETS

An eight page brochure from Radio Corporation of America, Camden 1, N. J., describes the latest transistorized language lab equipment offered by the firm, with full descriptions of other types of laboratory systems and information on teacher-student benefits of this modern technique.

(For Further Details Circle Index Code 0110)

Catalog 59, from Claridge Products & Equipment Co., Harrison, Ark., offers a complete, illustrated description of the firm's line of chalkboards, bulletin boards, and aluminum trim. The full color catalog also features bulletin board cabinets, trophy and display cases, reversible chalkboard, sliding cabinets, and portable chalk and bulletin boards.

(For Further Details Circle Index Code 0111)

A full color brochure from the Maple Flooring Mfgrs. Assn., Chicago 1, Ill., illustrates the various grades of hardwood maple flooring.

(For Further Details Circle Index Code 0112)

Steel and wood science laboratory furniture is described in a comprehensive catalog from Laboratory Furniture Co., Inc., Mineola, L. I., N. Y. Write for catalog No. 59E-5F.

(For Further Details Circle Index Code 0113)

The 1959 Asphalt Tile Color Classification Chart presents recent marbleized, terrazzo, and cork tile patterns from leading manufacturers. Single copies only are available from Asphalt and Vinyl Asbestos Tile Institute, New York 17.

(For Further Details Circle Index Code 0114)

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MANUFACTURERS NEWS

An English text-to-Braille computer has been devised by International Business Machines Corp., White Plains, N. Y. The processing system, Model 704, can translate a 300-page book in one hour, a job which would take a skilled translator six days. It answers the problem of a serious shortage of Braille translators whose training time normally takes two years.

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June, 1959

33

55

631

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| ST-3 | For Greater Stop-Ability, Bendix- Westinghouse | ST-8 | Folder C-908-0, Firestone Tire and Rubber Company |
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| | School seating | | 616 | Hillyard Chemical Company 57 Maintenance supplies |
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| 64 | | . 58 | | • |
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| 69 | Cramer Posture Chair Co., Inc., | . 63 | | |
| | Business practice furniture | | 623 | Nesbitt, Inc., John J |
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| | Division | . 72 | 624 | Powers Regulator Co |
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|-------------|--|-------------|---|
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| 090 | Bohn Duplicator Corp 64 Rotary Mimeograph | 0111 | |
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| 092 | Bemis Bro. Bag Co | | |
| 093 | Jack C. Coffey Co | 0113 | |
| 094 | Alim Corp | 0114 | |

| No. | | Page No. |
|------|--|-------------|
| 095 | Huntington Laboratories, Inc. Floor Machine | 66 |
| 096 | Hydro Valve Corp | 66 |
| 097 | Esterbrook Pen Co | 66 |
| 098 | Rolfe Products Co | 66 |
| 099 | School Equipment Mfg. Corp Portable Laboratory | 68 |
| 0100 | School Equipment Mfg, Corp Lab Furniture | 68 |
| 0101 | Sico Mfg. Co., Inc | 68 |
| 0102 | Transvision, Inc. | 68 |
| 0103 | Hamilton Mfg. Co | 68 |
| 0104 | E. H. Sheldon Equipment Co Lab Tables | 70 |
| 0105 | Smith System Mfg. Co Split Lid Desk | 70 |
| 0106 | World Dryer Corp | 70 |
| 0107 | Fred Medart Products, Inc Exercise Unit | 70 |
| 0108 | George F. Cram Co | 70 |
| 0109 | Shwayder Bros | 70 |
| 0110 | Radio Corporation of America Brochure | 70 |
| 0111 | Claridge Products & Equipment Company | |
| 0112 | Maple Flooring Mfgrs, Assn Brochure | 70 |
| 0113 | Laboratory Furniture, Inc | 70 |
| 0114 | Asphalt and Vinyl Asbestos Tile Institute | 70 |

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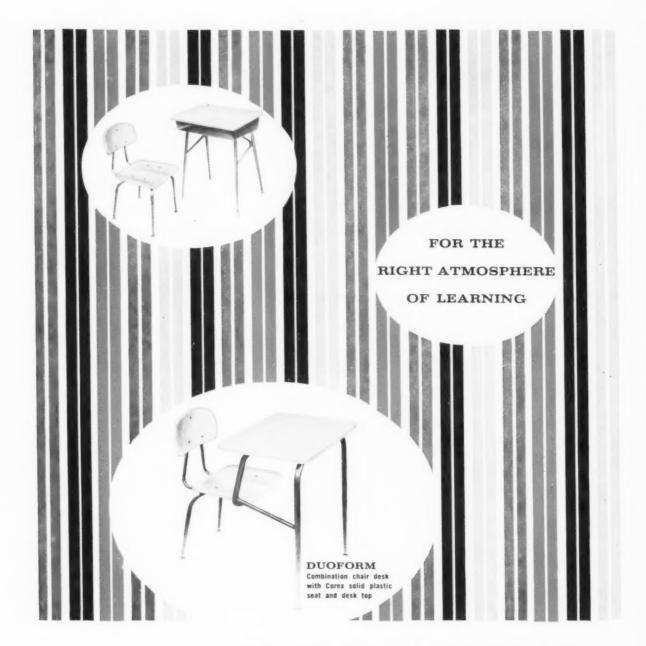


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